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THE NEWSPAPER OF THE INDUSTRY

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INSIDE DOPE

by GEORGE F. TAUBENECK

Stories of the Week
Verse of the Week
Philosophy of the Week
Do Your Figures Check?
Rudy Lotz, Nacilbuper
Parents Parlor—You Think You Have Problems

Stories of the Week

Guest speaker before a college economics class reviewed his business career. He mentioned one employer who had indulged in shady practices.

"Soon as I realized there were dishonest profits in that business I got out of it," he unctuated.

Interrupted a cynical student: "How much?"

Mother (entering room unexpectedly): "Why I never . . . !"

Daughter: "You must have!"

The jolly Friday Club chattered away noisily at the home of Mrs. Frank Nussbaum. All their small children were frolicking outside in the summer sunshine. Mothers were happy indeed until . . . Judy Chervinko barged into the house crying.

"Harry and Sheilah won't let me play a new game with them," she bawled.

"How do you play that game?" Sheilah's mother prompted, nervously.

"They're playing they just got married."

Uneasily the moms of Sheilah and Harry arose and flounced outside.

False alarm. The kids had tied tin cans to tail-ends of their bicycles and were clattering racketedly around the block.

Verse of the Week

My mind lets go a thousand things,
Like dates of wars and deaths of kings,
And yet recalls the very hour—
'Twas noon by yonder village tower,
And on the last blue noon in May,
The wind came briskly up this way,
Crisping the brook beside the road;
Then, pausing here, set down its load
Of pine-scents, and shook listlessly
Two petals from that wild-rose tree.

—THOMAS BAILEY ALDRICH

Philosophy of the Week

Luther Burbank fell in love with plants; Edison fell in love with invention; Ford fell in love with motor cars; Kettering fell in love with research; John Patterson fell in love with salesmanship; the Wright brothers fell in love with airplanes.

Someone has truly said:

"Be careful what you set your heart on for it may come true." The men who harness their hearts to mighty tasks often see their dreams become realities.—*Silver Lining.*

In an informal talk before the Institute for Management, Franklin J. Lunding recently suggested that every businessman ask himself the question: "Am I mature?"

"You can judge whether a person is mature in reasonably simple ways," Mr. Lunding pursued.

"Where the symbol of office is very important to a man, I am always suspicious. Or if he is disturbed because of the size of his office, the style of his desk, whether he has a fancy leather swivel chair or just an ordinary desk chair. These, and many other little things, indicate immaturity.

"Truly mature people have very little ego. They are modest. They are more interested in the end result, and in how they can help to make others successful, than they are in what happens to them as individuals. A good job will earn ample rewards, both in money and other satisfactions, without a man worrying about his position, title, and ability to awe his inferiors."

Do Your Figures Check?

Several years ago "Dope" added up what it costs to drive a car on business, after questionnairing 200 business travelers.

The figures showed then that the

(Concluded on Page 11, Column 1)

60,000 Homes Seen Air Conditioned By End of Year

NEW YORK CITY—Cloud Wampler, president of Carrier Corp., last week forecast that the number of new fully air conditioned homes in 1953 should total about 60,000, an increase of 300% in a year.

He spoke at ceremonies held at the Waldorf-Astoria honoring the grand national prize winners in Carrier's nationwide competition among architects for the best designs for air conditioned homes.

"In 1952," Wampler said, "about 15,000 new homes, or 1.5% of the total constructed in the United States, were equipped with year-round air conditioning.

"This year, 1953, recent data indicate that the total number of air conditioned homes should approximate 60,000, or 6% of all homes built—a gain of 300% in a single 12-month period."

He added that the 60,000 figure would be higher if it were not for the

(Concluded on Page 29, Column 1)

Servel Adds Freezer, Four Refrigerators

CHICAGO—Announcement of additional models to supplement Servel's line of household refrigerators, home freezers, portable electric refrigerettes, and water heaters was made recently at the company's mid-year conference of appliance distributors.

W. Paul Jones, Servel president, unveiled the new appliances—four electric compression refrigerators with pushbutton automatic defrosting, an upright home freezer with nearly 22 cu. ft. of storage space, and deluxe versions of the Wonderbar refrigerettes covered in spotted calfskin and luggage leather. He also revealed that the company would soon add electric water heaters.

The new pushbutton automatic defrosting feature is offered in four electric compression models—two of

(Concluded on Page 4, Column 1)

Death Takes Cyril Tasker, Director of ASHVE Research

NEW YORK CITY—Cyril Tasker, director of the A.S.H.V.E. Research laboratory, died suddenly on May 27 at the age of 54. Tasker had attended a meeting of the I-B-R held at Absecon, N. J. and was en route home when he succumbed to a heart attack in Warren, Ohio.

He had been director since 1943 and previously for 13 years was a member of the staff of the Ontario Research Foundation. As a senior research fellow at the foundation, he carried on important investigations relating to fuels, and a variety of problems

(Concluded on Back Page, Column 4)

'Fill 'Er Up' Here Means Gas—and Cool Air

HOUSTON, Texas—At a service station here, customers will not only get their car windshield cleaned and water and oil checked but a shot of conditioned air as well.

In a move to attract more business, the enterprising station operator has acquired a mobile 3-ton air conditioning unit. The unit will be wheeled up to each customer's car and will fill the interior with cool air while the attendants service the vehicle.

The operator expects business to boom this summer.

ASRE To Meet At Lake Placid June 28 - July 1

LAKE PLACID, N. Y.—Conferences on home freezers and residential air conditioning will be held in addition to regular technical sessions when the American Society of Refrigerating Engineers convenes for its 40th semi-annual meeting at the Lake Placid club here June 28 through July 1.

All meetings are scheduled for the mornings, leaving the afternoons free, except for committee meetings, so members and guests may enjoy the features of this famed vacation spot in the northern Adirondacks.

A varied program of 13 papers has been lined up for the three regular technical sessions by the program committee, headed by J. R. Hornaday of Deepfreeze, chairman, and Walter A. Kuenzli of Crosley, vice chairman.

Topics at these sessions will include cooling tower selection, air cooling coil performance, compressor design, heat transfer film coefficients, Air Force air conditioning require-

(Concluded on Page 29, Column 3)

Sharp Calls for Higher Pay for Appliance Sellers

CHICAGO — Paying salesmen proper compensation is the best way to attract the best young talent to the appliance industry, according to John C. Sharp, president of Hotpoint Co.

"There is nothing that builds self-respect and a liking for a profession more than a good pay check," he told the Appliance Div. of the National Association of Electrical Distributors recently.

Sharp said the industry is not now attracting young men.

"In college, they are taught business administration or marketing," he noted. "The supposition is that this will make them managers and executives. But where is someone teaching them to sell?

"Doctors go through internship and

(Concluded on Page 4, Column 2)

Air Conditioning Gets Big Time Publicity In 'Post', 'Look' Magazines

DETROIT — Air conditioning has hit the big time—publicity wise, that is.

When two popular national magazines carry feature stories on it within two weeks of each other, it is a sign that editors believe air conditioning is a subject of great popular interest.

The two magazines are the *Saturday Evening Post* and *Look.*

Saturday Evening Post's article is in the June 6 issue, already on the newsstands. It is called "They're Trying To Make Summer Extinct" and is written by Rufus Jarman.

The *Look* article will appear in the June 30 issue, on the newsstands June 16. It will be current through June 29. It is entitled "Air Conditioning . . . How It Works." The subtitle reads: "A quick refresher course on the appliance in your window and news about the latest models that help keep your home comfortable."

Jarman has written a comprehensive, informative article, giving the reader a general background on why

(Concluded on Back Page, Column 3)

Blessing Predicts 'New Era' for Soda Fountains

CHICAGO—The soda fountain business is entering on a period of great expansion, declares, L. G. Blessing, president of the Bastian-Blessing Co. here, manufacturer of fountain-luncheonette equipment.

Total fountain sales in the industry show an increase of 56% for the first four months of this year as compared with sales in the corresponding period last year, he asserted. In April alone sales were 65% above the April record last year.

Soda fountain operation has undergone evolution, like many other businesses, said Blessing. Out of the fountain's popularity emerged the fountain-luncheonette, which attracts more customers and gives the operator a larger profit.

It also has opened many new outlets for fountain manufacturers, as restaurateurs and other food purveyors have recognized it as the quickest and most economical method for serving fresh foods, he asserts.

While no longer confined to drugstores, aggressive merchants in the drug trade definitely find their fountain-luncheonettes their most potent means of attracting customers, and they operate them on a profitable basis, said Blessing.

He cited statistics to show that today a larger volume of business is done at drugstore soda fountains than at any previous time.

He commented that while some druggists have discarded their fountains, usually the fountains discarded were obsolete and had lost their power to attract trade. Stores with new equipment incorporating many new labor-saving devices were able to get and keep the available help.

(Concluded on Back Page, Column 5)

Coolerator May Become Division of IT & T

NUTLEY, N. J.—The Coolerator Co. and the four other domestic subsidiaries of International Telephone & Telegraph Corp. will become divisions of IT&T if a proposed merger of the subsidiaries is approved by shareholders.

Shareholders will vote on the proposal at a special meeting to be held in Baltimore July 10.

In addition to Coolerator, the subsidiaries are Capehart-Farnsworth Corp., Kellogg Switchboard & Supply Co., Federal Telecommunication Laboratories, Inc., and Federal Telephone & Radio Corp.

Details of the proposed action were disclosed by Col. Sosthenes Behn, chairman of the board, at IT & T's annual meeting held here recently. He said the merger "should result in a 50% higher profit for the parent company than a year ago."

Col. Behn indicated that IT & T plans to develop the foreign business of Coolerator. He said Coolerator's

(Concluded on Page 4, Column 5)

RACCA Meeting To Be Held In Cleveland, Nov. 8-11

CHICAGO—Refrigeration and Air Conditioning Contractors Association will hold its 8th annual convention Nov. 8-11 at the Hotel Carter in Cleveland, tying-in with the All-Industry Refrigeration & Air Conditioning Exposition.

Contractors planning to attend the convention are urged to make reservations through Ernest W. Farr, Bell Refrigeration Corp., 18526 Detroit Ave., Cleveland. Farr is a director of RACCA and program chairman for the convention.

Detroit Official Wants Auto A.C. Out of Code

Contractors To Fight for Retention of Automobile Systems In Safety Code

DETROIT—Faced with the announced intention of the city's commissioner of buildings and safety engineering to go to the city council and ask for the exclusion of automobile air conditioning using "Freon" refrigerants from Detroit's refrigeration safety code, members of the Refrigeration and Air Conditioning Contractors Association of Detroit are preparing to fight the action before the city council.

Commissioner Joseph P. Wolff made his decision known at a meeting called by Frank Drogosch, Detroit chief safety engineer, to discuss the application of the code to automobile air conditioning.

Both the refrigeration contractors and the automobile dealers and manufacturers were represented at the meeting.

The code as written now would require automobile manufacturers and dealers who install or service automobile air conditioning units to have a refrigeration contractors license. It also requires permits for installation and annual inspection by the city, but these two provisions, both groups agreed, could be waived.

The only bone of contention was whether or not a license should be required. The refrigeration contractors maintained that it should and the automobile representatives were

(Concluded on Back Page, Column 1)

Wage-Price Freeze Killed In House

WASHINGTON, D. C., June 3—The House Banking Committee today voted to kill a Senate amendment to the standby controls bill which would have authorized a 90-day freeze of wages, prices, credit, and rents by Congressional action in war or an emergency.

The committee, which has been holding hearings on the bill (S. 1081), was scheduled to complete action on the measure tomorrow (June 4).

The Senate Banking Committee's version of the bill had contained a provision for a 90-day wage, price, and rent freeze either in time of war or when the President declared a national emergency. The committee's bill also provided authority for

(Concluded on Page 29, Column 4)

Philco Raises Prices On 23 Appliance Models

PHILADELPHIA — New higher retail prices on 10 models of refrigerators, five freezers, and eight electric ranges were announced recently by Philco Corp. here.

Price increases ranged from $5 to $20 on refrigerators, $10 to $20 on ranges, and $20 to $70 on freezers. Increased cost of steel, copper,

(Concluded on Page 29, Column 2)

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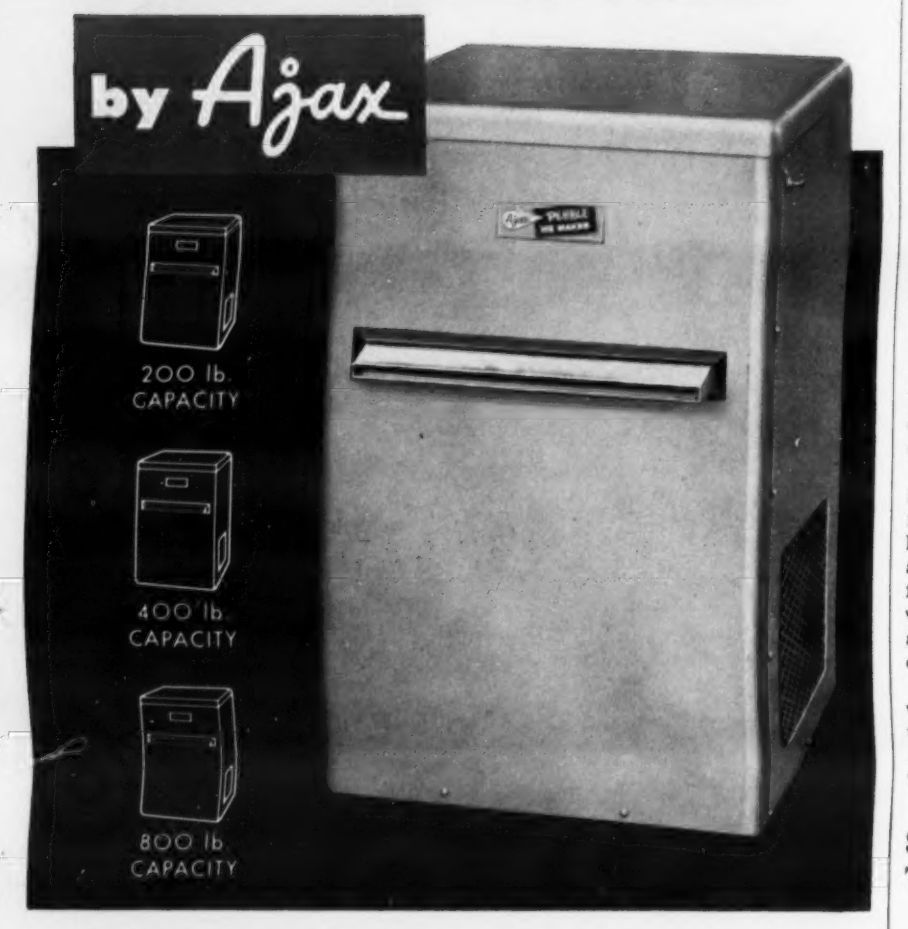

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4. **The smallest, most compact ice maker made...** less than a square yard of floor space; only 39" high. Perfect for under-counter installations.

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Solid, long-lasting ice cubes...350 lbs. a day...has easily accessible bin.

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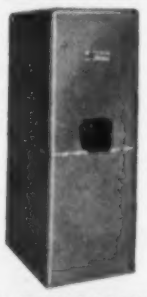

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1500 lbs. of flake ice a day...cold, dry flakes at the flick of a switch.

PEBBLE ICE MAKER
200 lb.capacity
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800 lb.capacity

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☐ I'm interested in an Ajax Distributorship ☐ I'm interested in an Ajax Dealership

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COMPANY.....
ADDRESS.....
CITY..... STATE.....

AJAX... SPECIALISTS IN ON-PREMISE ICE MAKING EQUIPMENT

Chicago, Cleveland Contractors Hold Joint Meeting In Chicago

CHICAGO—Something "different" in the way of refrigeration contractor association activity took place at the May meeting of the Refrigeration and Air Conditioning Contractors Association of Chicago, when 10 members of the Cleveland association made a special trip to Chicago to join with the Chicago group in their May meeting.

Following dinner at the University Club, President John Annis of the Chicago association introduced the Cleveland visitors, and then outlined activities of the Chicago group over the past two years.

Committee chairmen of the Chicago association gave reports for each of their committees, and the activities of the two associations were compared through a series of questions and answers.

Discussions were held—with close to 100% participation—on numerous trade relations, labor relations, and apprenticeship problems; cooperation with other allied groups in the industry; and the unfair trade practices of dairies and other food handlers in selling refrigeration equipment.

William L. Long, chairman of the program committee for the Chicago group, then conducted a discussion on several surveys which had been made by the Chicago association. The first was a comparison of bids which had been submitted by members on a typical air conditioning installation, specification and plan for which had been sent to each member. While it was found that the bids submitted closely parallel each other, the survey evoked some interesting points.

Another survey — "Arriving at Service Charges" — won the commendations of the Chicago and Cleveland contractors. The Cleveland men agreed that it offered a good basis for computing charges (on service work only) and probably would be applicable to most sections of the country.

(A detailed analysis of this survey, with the average figures arrived at, will be presented in more detail in an article to appear in AIR CONDITIONING & REFRIGERATION NEWS).

State Distributing Appointed To Handle Servel Products

MILWAUKEE, Wis. — State Distributing Co. has been named exclusive distributor of all Servel products in Wisconsin and upper Michigan.

Forrest F. Lane, general manager of State, said that his company would launch a drive immediately to promote the Servel automatic "Ice-Maker."

The new distributor is in Servel's midwestern sales region which is under the direction of William K. Grube, manager of Servel, Inc., Chicago.

To Stay Open Friday Nights

GOUVERNEUR, N. Y.—Appliance stores and other merchants here voted to stay open for business on Friday nights during July and August, instead of Saturday nights. The action was taken at a Chamber of Commerce meeting.

FILTRINE "Taste-Master" PURIFIER

Stop service calls . . . keep out rust and sludge . . . open new doors to sales acceptance!—with coolers, ice-makers, sell "Taste-Master"!—checks chlorine, traps sediment; promotes service-free satisfaction with all water processing appliances. Write—

Filtrine MANUFACTURING CO. BROOKLYN 38 • N. Y.
"Water Coolers and Filters for 40 Years"

Frigidaire Has Biggest Sales Day and Week

DAYTON — Frigidaire dealers recently had their biggest single week in history with retail sales of over $24,750,000 resulting from a concentrated sales drive, Herman F. Lehman, general sales manager, reported.

The week, which was climaxed May 22 with a record-breaking single-day retail sales volume exceeding $9,500,000, was planned by Frigidaire as a test of the present market potential. Included were sales of major appliances, air conditioning units, and commercial refrigeration products.

Heads of Frigidaire's national distributing organization, attending a business conference here, were optimistic about the sales outlook for the remainder of the year.

Mason Roberts, General Motors vice president and Frigidaire general manager, reported the first four months of this year were the biggest initial four months in Frigidaire's history. Product inventories are considerably below the same period last year, he said.

Though Frigidaire will produce more than 100,000 room air conditioning units in 1953, demand for these and other air conditioning products far exceeds supply, Roberts said.

The need for aggressive selling in today's competitive market was stressed at the conference, and plans for an extensive, hard-hitting mid-summer sales campaign were outlined.

Orange Juice Takes Lead

Frozen Food Gains More Popularity In Milwaukee Than Any Other Food Item

MILWAUKEE — Frozen foods gained more in popularity here during the past year than any other food category, according to the 1953 Milwaukee *Journal* study of consumer buying habits.

Frozen poultry jumped in popularity by 9.4% so that now 32.4% of consumers are using it.

Leading frozen food purchased continues to be orange juice. A total of 60.8% said they used it, compared with 53.6% the previous year.

Frozen vegetables were purchased by 58.5% of the buyers, a slight gain over the 57% last year.

This was the 30th annual survey conducted by the newspaper and was based on a sampling of 5,000 families.

Temprite Div. Sales Head Moves to N. Y. Quarters

BIRMINGHAM, Mich.—James W. Archibald, recently appointed eastern division sales manager of Temprite Products Corp. here, is now headquartering at 750 Kappock St., New York 63, N. Y., the company announced. He had formerly been located in Collingswood, N. J.

Archibald is responsible for Temprite sales in the entire eastern seaboard area from Maine to Florida.

Bakery Finds Sales Jump When Customers See Refrigerated Display Cases, Know Stock

STOCKTON, Calif. — Instead of concealing refrigerated storage cases in the rear of the bakery, the baker will find it pays to display them, according to Jake Fetzer, owner of Webb's Bakery, here.

Two 3-compartment stainless steel refrigerators were installed behind the cash register and wrapping counter where no customer can fail to notice them in the newly-remodeled bakery. Across the top of the two cases is an eye-catching sign, supported at one end by a polar bear and at the other by a penguin, with "Fresh Frozen Bakery Goods" lettered in white on an ice-blue background.

The -10° F. refrigerated cases with storage capacity of over 100 trays, make it possible for Fetzer to keep on hand a full week's stock of any baked goods, and more important, to display the reserve stock instantly whenever the opportunity arises. An excellent job of over-the-counter public relations has been carried out.

When a customer asks about the refrigerated cases or whether the bakery has a certain stollen, cake, cookie, or bread, it is a simple matter for the salesperson to open one of the stainless steel doors and show the frozen stock on hand.

"Once the customer knows that we have such a stock, she invariably tells friends about it," Fetzer further indicated.

"There has been a marked increase in future orders simply because our customers feel that they are leaving nothing to chance."

Prior to installation of these two units, plus three more in the bakery shop, Fetzer found the 5-day work week a serious problem. Often it was necessary to work overtime shifts at night, and the bakery frequently ran out of wanted baked goods when demand was high. Now, with adequate space for an entire week's inventory of all baked goods, all of these drawbacks have been eliminated.

Appliance Sales Volume Up In Omaha, Neb. Area

OMAHA, Neb.—Sales of all major electrical appliances in the Omaha area in the first four months of this year were up from the like period of last year, according to the Omaha Public Power District.

Reports from 96 dealers revealed that the biggest increases were in room air conditioners, automatic washers, radios, and television receivers. The figures for the four months were:

Electric ranges, 1,082 as compared with 1,064 a year ago; water heaters, 482 and 342; refrigerators, 1,801 and 1,575; freezers, 623 and 441; conventional washers, 1,550 and 1,296; automatic washers, 1,282 and 872; dryers, 668 and 499; room air conditioners, 40 and 11.

Alan To Convert Theater To Showroom, Warehouse

WORCESTER, Mass. — Plans of Alan Corp. to buy the Greendale Theater and remodel it into a showroom and warehouse for its commercial refrigeration, air conditioning, heating, appliance, insulation, aluminum awning, and combination window business were revealed recently by Edwin Robbins, president and general manager.

A 1,500-sq. ft. showroom will occupy what is now the theater lobby. The 1,200-seat auditorium will be converted to warehouse and office space. Part of the theater parking lot will be used as a bulk oil storage plant and part as a 250-car parking lot for customers.

REVCO
15 CU. FT.
CHILL CHEST
FOOD FREEZER

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● Sell the Revco Freezer with new engineered features that make it the outstanding freezer line for 1953! Act now . . . get this line today!

Faster Freezing

NO FAN NOISE..NO CONDENSER CLEANING
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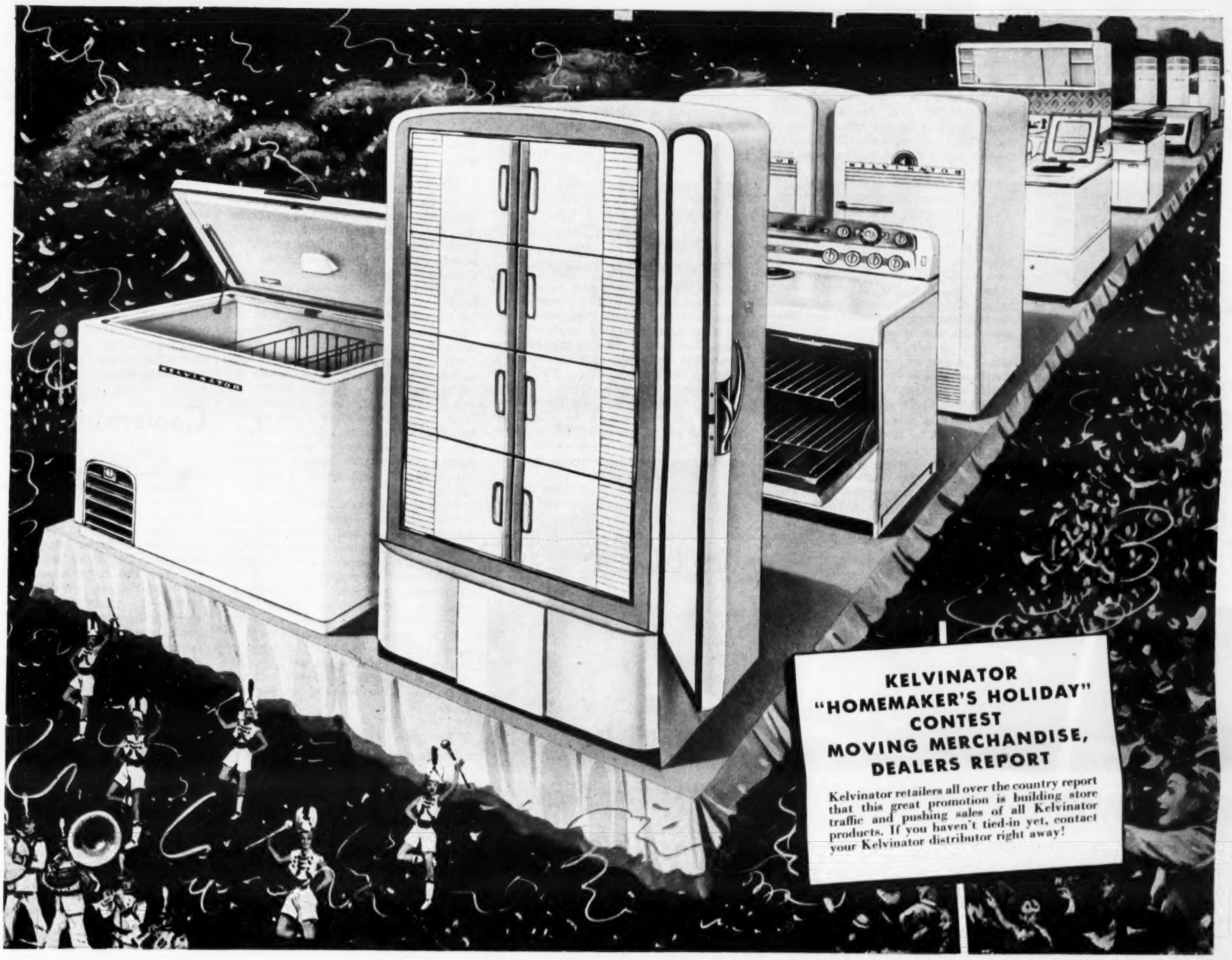
KELVINATOR
"HOMEMAKER'S HOLIDAY"
CONTEST
MOVING MERCHANDISE,
DEALERS REPORT
Kelvinator retailers all over the country report that this great promotion is building store traffic and pushing sales of all Kelvinator products. If you haven't tied-in yet, contact your Kelvinator distributor right away!

New Kelvinator Freezers—with Features that *Make Sales*—Lead the Parade to Better Business!

TODAY, more than ever, home freezers represent sales opportunity for Kelvinator retailers . . . because the 1953 Kelvinator Freezer line now includes *both upright and chest-type models.* And these new freezers not only have selling features that make sense to the buyer . . . they are backed by promotion and planning *specifically designed to move merchandise in a highly competitive market!*

Take the new 18 cu. ft. Kelvinator Upright, for example. This freezer provides 31.4% *more* fast-freezing surface than other upright types. All five interior walls are lined with freezing coils—top, bottom, sides and back. Foods freeze properly and *stay frozen* safely when placed *anywhere* in the freezer. This new Kelvinator is divided into four separate compartments—each with its own individual inner door—and holds 630 pounds of food in a cabinet only 36" wide!

Look at the Kelvinator chest-type models. The cabinet of the new 7 cu. ft. Kelvinator is no larger than old-style 6's. To achieve this added storage space without increasing outside dimensions, Kelvinator uses the "wrap-around" condenser—a great spacemaking development pioneered by Kelvinator in 1946. Besides the new 7 cu. ft. model there are Kelvinator Chest-type Freezers in 9, 13 and 20 cu. ft. capacities.

The many superior selling features of these new Kelvinator Freezers—their inherent quality, value and proved dependability—are typical of every product in Kelvinator's new, expanded line. All of Kelvinator's home appliances and products mean bigger and better business for retailers now and in the future. Why not find out more about the opportunities Kelvinator offers. Call or write for the complete Kelvinator story.

JOIN THE Kelvinator PARADE TO BETTER BUSINESS!

Division of Nash-Kelvinator Corporation, Detroit 32, Michigan

REFRIGERATORS • RANGES • FREEZERS • WASHERS AND IRONERS • WATER HEATERS • DEHUMIDIFIERS • KITCHEN CABINETS • SINKS • "ELECTRO-DRAIN" GARBAGE DISPOSERS • ROOM AIR CONDITIONERS

Servel--

(Concluded from Page 1, Column 2)

which are also equipped with the exclusive automatic ice-maker feature, which freezes ice cubes without trays and automatically stores them in a basket.

The two automatic ice-maker models with the new pushbutton defroster are 1137-CD, which has a suggested retail price of $499.50, and 937-CD, $429.50.

The other two pushbutton defroster models are 1136-CD, priced at $429.50, and 936-CD, $359.50.

The big new vertical freezer is the top-of-the-line addition to the previously announced 11-ft. and 15-ft. vertical freezers, balancing the 9-ft., 15-ft., and 22-ft. horizontal chest-type models.

Servel's exclusive food purchase plan, which enables the housewife to save 25% on as much as $200 worth of food at the retail stores of her choice, will also apply to the new model.

The suggested retail price of the 22-ft. model is $689.50.

The deluxe Wonderbars, covered in spotted calfskin or luggage leather, will be produced in limited quantities for the luxury market. Standard models have plastic cabinets finished in mahogany, blonde, or white, according to the company.

To round out the company's line of four grades of gas water heaters ranging in size from 20 to 45 gals., Servel will shortly offer five new electric water heaters. These will include two table-top models, resembling kitchen cabinets, with capacities of 35 and 45 gals., and three cylinder-type heaters with capacities of 40, 52 and 80 gals.

Higher Pay for Appliance Sellers--

(Concluded from Page 1, Column 3)

residencies before practicing medicine. Engineers take long and tedious test and practical work before taking on important engineering assignments. Plasterers, tool-makers, or painters serve an apprenticeship—doing what? Working with plaster, tools, or paint under skilled supervisors.

How To Make a Salesman

"Now, how do we make a salesman? Educate him in business administration and marketing, then brush him up against some brass in the office, give him a detailed description of the product, and throw him out into the cold, wide world of competition. Not once has he been told how to get an order. He soon calls himself a peddler in a sorrowful jesting manner."

Sharp then read part of a recent newspaper story which said that business can't sell college graduates on sales jobs, that the graduates were being attracted to such other fields as engineering, chemistry, and business administration.

"This is not a healthy situation, and it must be corrected or we will continue to lose ground to other industries competing for the consumer's dollars," Sharp stressed.

"In the first place, the profession of selling must be restored to the position that it used to occupy with relation to other professions. One of the quickest and most effective ways to do this is to pay proper compensations; and that means during the periods of learning and training.

"If we can pay juniors in engineering colleges $300 a month for vacation work, it must give them an idea that there is a future in that profession. And when he graduates, he works at the most simple and fundamental of engineering work where he sees, and hears, and feels what the laws of science can do. He doesn't study organization and other executive problems, but learns by doing.

"I firmly believe we have to add a real practical training program for our prospective salesmen . . .

"Speaking of compensation, a survey made by a very high-level management association brought out the fact that there has been an unusual shifting around of executives in the past few years. The reasons, or excuses, depending upon the viewpoint, varied from climate to disagreement in policy. But the majority of presidents and vice presidents had moved on to other pastures because of compensation.

'What's Good for One . . .'

"Now, if presidents and vice presidents are subject to the pressure of that dirty old dollar, then why does not the same situation exist with a young salesman? And so my recommendation is to pay 'em."

Sharp termed this matter the industry's most important piece of unfinished business. He said the industry should also strive to minimize fluctuations in business, to improve service, to develop markets for new appliances, and to eliminate the excise tax on appliances.

In discussing the fluctuating nature of the business, Sharp referred to the tremendous drop at factory level in the inventory liquidation last spring.

"The financial statements of my company look good for the first five months of 1953, compared to the same period in 1952," he said.

"These statements show an increase of 90% over the same period last year. That should make me happy, as I took over the management a year ago.

"But I remember—and can never forget. We laid off people. The majority had families, and some of them I knew personally. Their incomes, not very large at the best, were stopped.

"This is not uncommon in this country, and you do not think too much about it. But when I found how really unnecessary it had been, it seemed a terrible reflection on us—you, me, our dealers.

What Does Union Platform Hold?

"Perhaps you read in the papers last week that Mr. Reuther is urging the automobile people to cut back production and eliminate predicted layoffs later. If you have read the C.I.O. platform for future contracts, you know of the demand for an annual wage. This should be a tip-off to all of us, as a change in political climate could result in these demands being accepted.

"It is up to the industry, the manufacturer, distributor, and dealer to make every attempt to remove the necessity for the unions to insist that their members be given these radical benefits. We can do this by cooperation and interchange of quick and accurate information about business conditions. It will work if given a chance."

Regarding service, Sharp said:

"In previous times, the dealer handled service and, oftentimes, the public utility serviced appliances. This has largely disappeared, and service has become the responsibility of the distributor, generally. With ever increasing competition, good and prompt service is a must.

"The automobile people have it down to a science. The television industry has improved a very serious situation and the appliance industry is making progress. But we must do more.

What the Appliance Industry Can Do

"First, the manufacturer will have to produce the best appliances possible and make repair parts readily available. The distributor must carry adequate stocks of parts at all times and arrange for service facilities where the dealers cannot do so.

"Most manufacturers are willing, and able, to provide the training for servicemen. One trouble is the high turnover in the serviceman profession. Better compensation, and build-up of importance, will do much to reduce the turnover."

Newcomers To Appliance Field

Sharp continued: "We have not finished the business of the newcomers in the appliance field. The dishwashers, garbage disposal units, dryers, air conditioners, and many others are not even started and are not encouraged by results so far.

"Probably we rely on methods used today to sell refrigerators and other accepted items. And yet, most of the effort is placed on refrigerators and there we find the stiffest competition and lowest margins. If we are to keep the entire appliance business from drifting to this level, we must develop the markets for new devices."

Turning to the excise tax, Sharp said, this is a "discriminatory, unfair, and uneconomical tax.

"Because it is a part of the expense of the distributor and dealer it has to be marked up just as much as any other item of cost in an appliance. The result is that the consumer pays in the price, about 80% more than the government collects, which is a high charge to pay for collection.

"I am not discussing the need for taxes, but I do resent this particular one, which is unnecessarliy burdensome on the consumer. We hear statements that prices are too high. If you look at it this way, you will agree that this is a baseless charge. If we passed the appliances on to the distributor at our cost, and eliminated all sales expense, the reduction would not equal what the consumer is paying in excise taxes alone.

"Consequently, the manufacturer cannot be accused of bias when he requests the elimination of the excise tax. But there are only a few hundred manufacturers, whereas the distributors number thousands, and the dealers count up to some hundreds of thousands. If all of these voices were raised in protest, some action might be obtained."

Coolerator--

(Concluded from Page 1, Column 4)

lines should be excellent for export to countries needing home freezers, room air conditioners, and the firm's other products.

However, IT & T's over-all program is aimed at expanding its domestic business, Col Behn told the shareholders. The corporation's objective, he explained, is to do 65% of total business domestically and 35% abroad. To show that IT & T is already moving in this direction, he pointed out that more than 45% of total revenues are now coming from domestic sources.

If the corporation's goal is achieved, it would represent a reversal of past operations. Col. Behn said the change in policy was necessary because foreign operations are always subject to interference in the transfer and exchange of currencies.

The IT & T executive also reported that the company has plans for developing Capehart-Farnsworth through an aggressive merchandising program.

MORE INFORMATION?
Use Handy Coupon
on "What's New" Page
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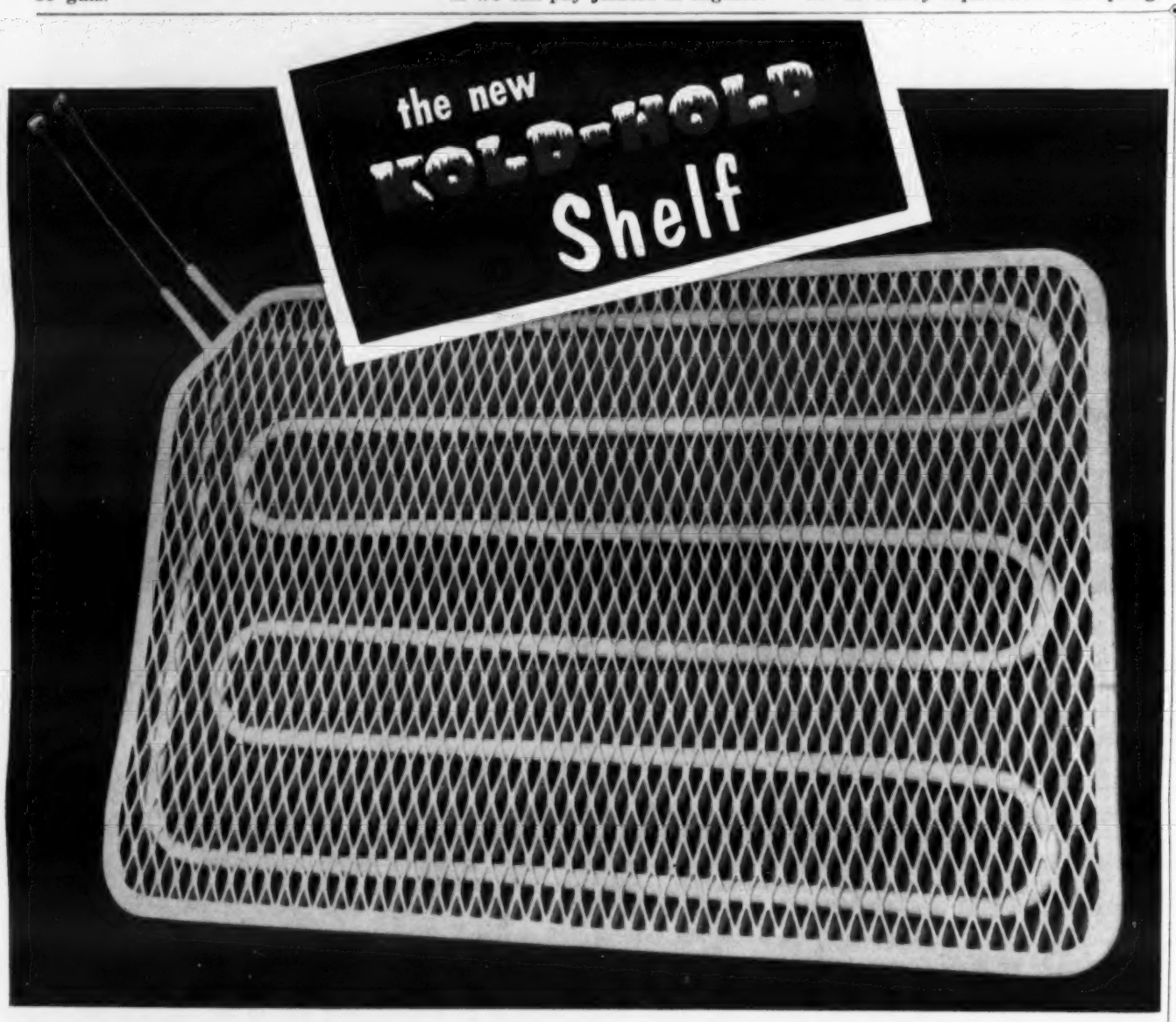
Use Key No. for fastest service.



. . . has 7 EXCLUSIVE DESIGN ADVANTAGES

1. SUPER EFFICIENCY—The new Kold-Hold Refrigerating Shelf has the best combination of faster pulldown and freezing than any other refrigeration plate or shelf. Its unique construction of expanded metal and tubing provides both conduction and convection of heat plus the wiping action of the air around its multiple surfaces.
2. LOWER INITIAL COST—In spite of this higher efficiency, Kold-Hold shelves cost far less initially than conventional plates. Their simplified design eliminates complicated tooling and manufacturing procedures which add to the cost of other designs.
3. SIZE AND DESIGN FLEXIBILITY— Most any size and fitting arrangement can be supplied to meet your needs. Fittings can be located anywhere along the outer edges convenient for easy installation in your cabinet.
4. EASIER CLEANING—Kold-Hold shelf construction leaves all surfaces exposed for fast, easy cleaning. Defrosting is fast and uniform due to the even temperature across the entire plate surface.
5. ADD SALES APPEAL TO YOUR FREEZER OR CABINET—Kold-Hold Shelves are modern and streamlined to match your most attractive cabinet designs. They are available with plain or "pro-seal" finish.
6. DEPENDABLE PERFORMANCE —Manufactured, sold and backed by a firm with years of experience in the refrigeration evaporator field, Kold-Hold Shelves are assembled by brazing in controlled atmosphere to keep the refrigerant passage clean, dry and free of leaks. They will provide trouble-free service throughout the life of the cabinet.
7. ENGINEERING ASSISTANCE —Refrigeration engineers, who have developed many advanced refrigeration products, will help work out your refrigeration problems.

WRITE TODAY FOR FULL DETAILS
KOLD-HOLD
division of TRANTER MANUFACTURING, Inc.
501 E. Hazel St., Lansing 4, Michigan

IT'S A GEM!

Dealers and users are excited about Gem Refrigerators . . . custom features, competitively priced, by a maker 30 years in the business. It's a terrific deal!
Rich, New Territories Open. Write today!
GEM REFRIGERATOR CO.
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POSITION AVAILABLE

With Fast-Growing Acme Industries, Inc.

MANAGING CHICAGO OFFICE AND
SUPERVISING SALES ACTIVITIES IN 6-STATE AREA.
SALARY, EXPENSES, CAR AND OVERRIDE.

Applicants should have experience in contacting Refrigeration and Air Conditioning Contractors, Supply Wholesalers, and Engineers.

Address Replies to: C. W. Millsom, ACME INDUSTRIES, INC.
600 N. Mechanic St., Jackson, Mich.

'Weather Prophet' Contest Gets Dealers Off To Running Start on Room Cooler Sales

OMAHA, Neb. — A "Weather Prophet" contest being sponsored by the Nebraska-Iowa Electrical Council and distributors of 15 brands of room air conditioners is credited by dealers here with giving a big boost to sales this season.

Several dealers reported that sales up to a late date in May already had exceeded the total for all of last year, which was the best in Nebraska history.

Don Rosenthal, executive secretary of the council, said the contest has been bringing in hundreds of entrants daily since it started in mid-May. It will continue through June 20.

Rosenthal also reported that both dealers and distributors in the air conditioning business in the Omaha region are convinced that 1953 will be a record-breaking sales year. The industry here thinks the prediction of 680,000 units this year for the whole industry is too low.

Although hot weather didn't arrive until the last week in May, when the temperature got up to 90° on two days, sales of room air conditioning units boomed throughout the entire month.

One wholesaler declared he had sold twice as many units so far as he did all of last year. Getting delivery from the factory will be the biggest problem, he believed.

He told of one retailer who was reluctant to take an allotment of 24 a month at a certain price back in April. The dealer sold and installed all 24 in less than a month.

An Omaha retailer asserted that his firm has "delivered more already than in all of 1952" and "we're not going to have ample stock if we get hot weather."

Entrants in the "Weather Prophet" contest are required to predict how hot it will be in Omaha on July 4 and complete this statement in 25 words or less: "I want a room air conditioner because . . . "

First prize is a five-day, all-expense vacation for two in Colorado, plus $50 in spending money and a ½-ton room air conditioner installed in the winner's home. Second prize is a ½-ton room unit installed in the winner's home.

In addition, a $30 merchandise certificate good toward the purchase of an air conditioner will go to every entrant whose high-temperature prediction is correct.

Contestants are required to pick up an official contest blank from one of the dealers listed in the advertisements and personally return the completed form to him. Participating are 50 Omaha dealers, eight in Council Bluffs, seven in Lincoln, and 24 in outstate Nebraska and Iowa.

Brands handled by sponsoring distributors include Admiral, Carrier, Coldspot, Crosley, Fedders, Frigidaire, General Electric, Hotpoint, International Harvester, Kelvinator, Philco, RCA, Remington, Servel, and Vornado.

Copy being used in the contest ads reads: "No matter how hot it gets this summer—you can choose your own weather . . . with a room air conditioner!

"Yes, even in the hottest weather the new room air conditioners will keep your living room, bedroom, or office as cool and comfortable as a mountain resort.

"These efficient, compact units whisk in fresh air, cool it, wring the water out, pump out smoke and stale air, help screen out irritating dust and air-borne pollens.

"Ask you dealer all about room air conditioners. His answers may help you write a better contest entry—and help you find the way to healthful, cool comfort in your home.

"Why suffer this summer? For the cost of a few pennies a day you can have the weather you want—the weather you need."

Pre-Season Ad Promotion Starts Customers Buying Room Coolers Early In May

BUFFALO — Frank Meyers Appliance Store here got its room air conditioning off to an early start by promoting the items considerably in advance of official start of the summer season.

The store started a strong promotional campaign on air conditioners early in May and found consumers in a responsive mood, especially after a few really hot days prompted home owners to start thinking about summer comfort.

An official of the store said that newspaper advertising and radio spots on air conditioners resulted in a large number of inquiries, paving the way for future sales.

Salesmen at Frank Meyers have been given special training to help them do an intelligent selling job on air conditioners and working models are on display on the selling floor.

Frank Meyers is featuring free installation in its pre-season promotion and also is offering five years' free service, a policy long followed in its appliance operation.

The kickoff advertisement featured photos of several units in typical room installations. The ad was captioned: "Free Installation Air Conditioners If Ordered Now — Pre-Season."

Copy added: "You will receive free installation and the service that has saved hundreds of thousands of dollars for our customers since 1934. Five years' free service.

"There is a model for every room, large or small. We have them all. We maintain our own 17-man department to service every appliance we sell."

Domino Named Buyer, Assistant to Nick Delgato

BUFFALO—James P. Domino has been appointed assistant to Nick Delgato, president of Delgato's Home Appliances, Inc. Domino has been associated with Delgato's for the last 18 months and recently has been sales manager of the company.

He will also be purchasing agent.

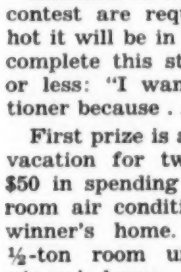
Data Given on Glazing The Air Conditioned Home

TOLEDO—"Glazing the Air Conditioned Home" is the title of a new pamphlet by Libbey-Owens-Ford Glass Co. available through distributors and district sales offices.

Consideration of planning of a home for air conditioning should start with the basic fact that it's a year-round operation, and then relate orientation, ventilation, and window planning to the site and design of home, it is pointed out in the pamphlet.

Data is presented on the transmission of solar energy through different types of glazing for windows. A discussion of both winter and summer effectiveness of Thermopane insulating glass and the role of heat-absorbing glass in the air conditioned home is included. Location of trees, trellises, service areas, and awnings is also covered in the treatise.

The pamphlet is LOF form M-23 and, although written in terms easily understandable by the laymen, it is designated as American Institute of Architects File No. 26-A-9 1953.



Versatile Sales Rep. or Service Manager

Need someone to spark your sales force, or solve your service and field engineering problems? My more than 20 years experience in the branch Sales & Service Departments of such leaders as Norge, Frigidaire, Kelvinator and Copeland—and operation of own refrigeration service organization—may be just what you need. Accredited Refrigeration Engineer—graduate of Chicago Engineering Institute. Granted 18 refrigeration patents. 41 years young. Will travel anywhere. Let's talk it over at your convenience.

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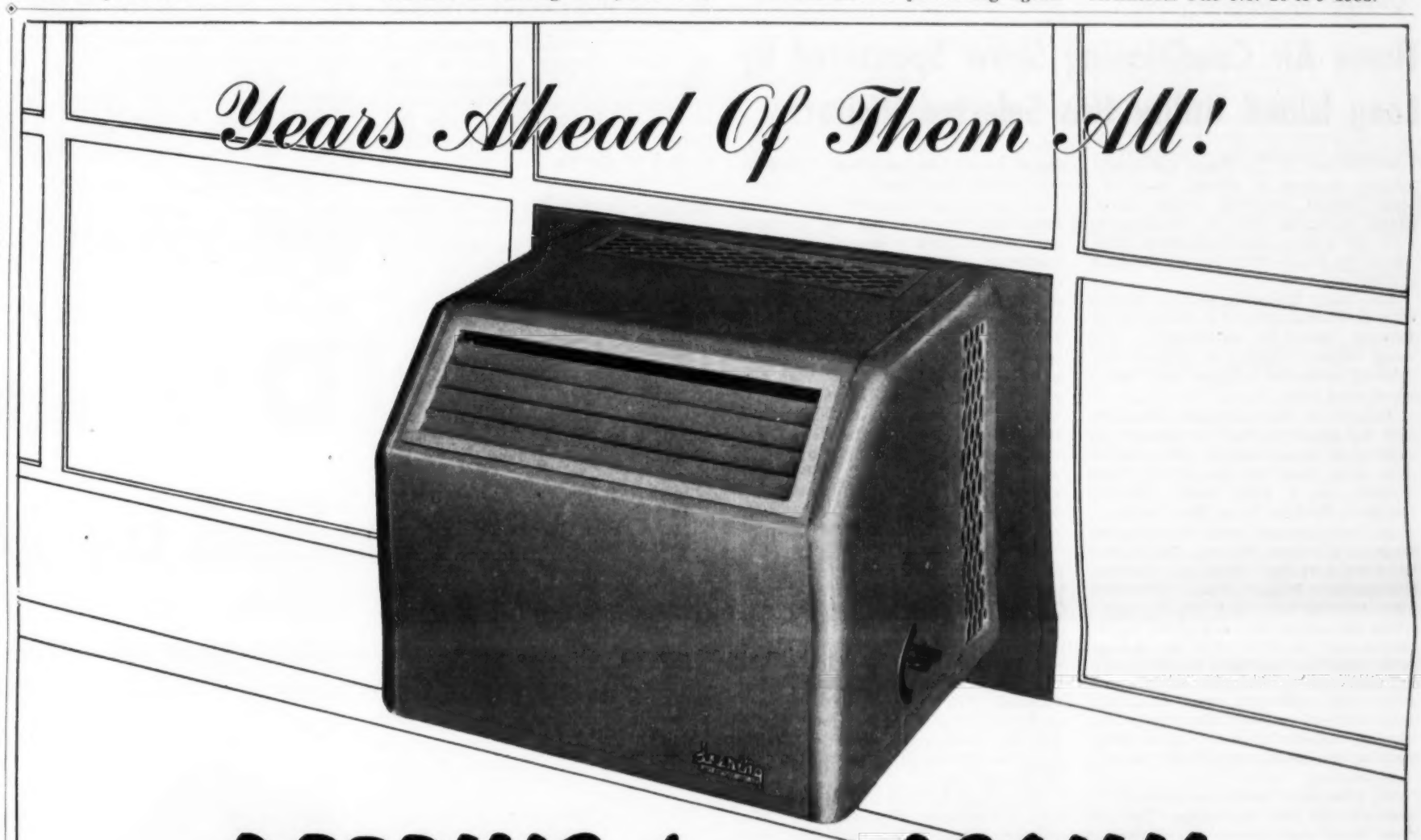
Los Angeles 19, California

Years Ahead Of Them All!



DEERING does it AGAIN!

HERE ARE 7 REASONS WHY DEERING ROOM AIR CONDITIONERS LEAD THE FIELD

1. The DEERING is the only room air conditioner that fits all Steel and Aluminum Casement Windows without mutilating or destroying mullions and muntins.
2. The DEERING is the World's smallest air conditioner, it can be installed in a window opening as small as 10¼" wide and 14½" high.
3. Condensation cannot form in the DEERING and cause trouble in later years, due to secret engineering that DEERING alone controls.
4. There is no other room air conditioner that will give you more comfort per horsepower, than the DEERING.
5. The DEERING is the only room air conditioner that can be installed in less than 30 minutes by customer.
6. The DEERING requires no special framing, window brackets or wing adapters — no installation kit needed.
7. The DEERING meets all demands, because . . . *THERE IS NOT A WINDOW MADE (CASEMENT OR DOUBLE HUNG) THAT THE DEERING WILL NOT FIT.*

AVAILABLE IN ⅓-½ & 1 HORSEPOWER MODELS

ACT NOW!
PROFIT IN 1953 FROM A BRAND NEW DIMENSION IN ROOM AIR CONDITIONING

The deering AIR CONDITIONING CO.
CINCINNATI 2, OHIO

Yes! I am interested in a franchise for the DEERING casement window room air conditioner. Please rush me full information.

*Name*_____
*Company*_____
*Position*_____
*City*_____ *Zone*_____ *State*_____

MAIL TODAY TO
THE DEERING AIR CONDITIONING COMPANY
1069 CELESTIAL AVENUE • CINCINNATI 2, OHIO

SERIOUS QUESTIONING of exhibitors' representatives indicated a genuine interest by the man-and-wife teams that made up the majority of visitors to Long Island Lighting Co.'s Air Conditioning Exposition at the Garden City hotel, Garden City, L. I., N. Y.

'Quality of Interest'

Home Air Conditioning Show Sponsored by Long Island Utility Has Selected Visitors

MINEOLA, L. I.—Home air conditioning received a strong boost on Long Island recently when Long Island Lighting Co., in cooperation with 10 major manufacturers, produced the area's first air conditioning exposition.

The main ballroom of the Garden City hotel was wired for the occasion. Results were so satisfactory that Long Island Lighting is already discussing plans for a bigger and better show next year.

Exhibitors were limited intentionally for the first show because of the restricted area available. The exposition was open to the public from 1 p.m. to 9 p.m. daily, Monday through Friday, in a May week.

Air conditioners were exhibited by General Electric, Bryant, Coolerator, Chrysler-Airtemp, Fedders, Carrier, Kelvinator, Magic Chef, Fresh'nd Aire, and Servel.

The exposition was organized as an educational venture with no selling to be done on the floor to safeguard the interests of retailers. Exhibitor's comments indicated that this aim was fulfilled. A large majority of the show's visitors appeared to be prospective purchasers genuinely seeking information.

A complete record was kept of visitors to the exposition through door prize registration. A uniformed girl from Long Island Lighting was stationed at the door to greet all visitors, ask them to register, tell them about the program schedule, and answer questions.

The program included door prizes given daily to the visitors; a "Mrs. Air Conditioner" beauty contest, featuring 47 married women from Long Island who were not company employes; a demonstration of freezer techniques by Long Island Lighting's Home Service Dept.; demonstrations afternoons and evenings by the various exhibitors; a variety of film shorts; free soft drinks; and a continuous TV showing including daily major league baseball games.

Background music was played over a public address system whenever no special programs were scheduled, adding to the comfortable, friendly atmosphere of the entire exposition.

Promotion began several weeks prior to the show with posters displayed in all Long Island Lighting Co.'s 39 local commercial offices and various major stores throughout the territory.

A concentrated advertising schedule for the week prior to the show and running during the entire show week included daily and weekly newspapers and an increasing schedule of daily spot announcements on three local radio stations.

The main feature of the promotion and advertising program was "Why Simmer This Summer?" The show was entitled "The 1953 Air conditioning Exposition." Because this was considered to be a class show and one in which quality of interest was more important than just large numbers, special announcement cards were sent to a selected list of residents in Long Island Lighting's territory.

The winner of the "Mrs. Air Conditioner" Beauty Contest received a trophy and a diamond wrist watch. She was selected entirely by visitors to the show from photographs displayed at the entrance.

Servel Distribution Revised In Eastern Sales Territory

NEW YORK CITY—Two changes in distribution in Servel's eastern appliance sales territories were announced recently by Bert Cole, regional manager.

Cole said a new sales office has been opened in Albany, N. Y. by Servel-New York Corp., distributing subsidiary of Servel, Inc. The office is located in Rooms 304-305, Central Warehouse Corp. Building, Colony and Montgomery Sts. This office will serve the area formerly covered by Levalley McLeod.

The other change is expansion of the sales territory of Cardee Distributing Corp. of Springfield, Mass. to include all of Connecticut formerly served by DeLia Distributors Inc. Cardee headquarters for Connecticut is in New Haven.

Airtemp Dealer Named In Tulsa

TULSA, Okla.—Temperature Control Co., 1425 S. Boston, has been appointed authorized dealer for Chrysler Airtemp air conditioning.

AWNINGS installed over window conditioners in the Metropolitan apartments in Waco, Texas helped cut operating costs as well as boost efficiency. Cost of these awnings will be paid for through savings effected in a single month of summer operation, according to the management.

Awnings over Window Units Cut Costs, Up Efficiency for Apartment Building

WACO, Texas—A sharp reduction in operating and maintenance cost, plus greatly improved efficiency during the hot summer months, has been the result of installing tiny awnings over package coolers used at the Metropolitan Apartments here.

Metropolitan Apartments, an experiment in "maximum housing in minimum space," consists of 48 small apartments, built in four rows of 12 each, motel-style in a central Waco residential district.

Occupied primarily by military personnel serving a nearby flying training air force headquarters, the apartments are cooled by 48 Fedders ¾-ton units, installed in early 1952.

When maintenance costs for the first season exceeded the estimate by a healthy percentage, an investigation was undertaken. Much of the need for repairs, unsatisfactory cooling output, etc., was traced to the hot Texas sun, pouring directly upon the air conditioning units extended from the apartment windows.

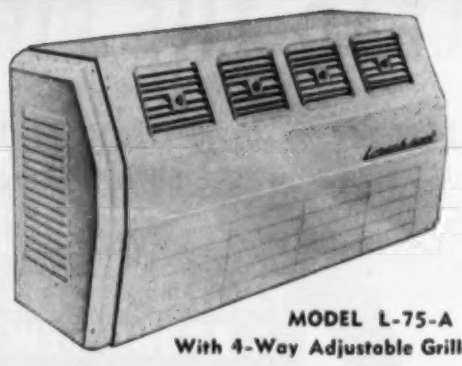
A single experimental awning was installed, and a close check kept on the output of the air conditioner, plus operating costs. A single month was enough to convince the management that the direct rays of the summer sun were "the villain."

Awnings were then installed over all 48 units. These add a decorative touch of bright green trimmed with white contrasting against the buff walls, and their cost will be repaid in a single month's operation.

DEALERS - DISTRIBUTORS ! !

here 'tis!

READY TO MAKE $ $ $ JUST FOR YOU!



MODEL L-75-A
With 4-Way Adjustable Grilles

THE LOMBARD ROOM AIR CONDITIONER

Here is the Room Air Conditioner that will practically sell itself. Engineered completely to meet ALL demands of the public, and priced to please.

* THERMOSTATIC CONTROL
* EASY TO OPERATE
* REMOVES HUMIDITY
* PURIFIES THE AIR
* ECONOMICAL

PLUGS IN LIKE YOUR RADIO

HERE'S REAL PROFITS - JUST FOR THE ASKING!

LOMBARD MANUFACTURING COMPANY
25 Oak Hill Avenue, Youngstown, Ohio

Yes! Send me complete story about the Lombard Room Air Conditioner.

☐ Dealer ☐ Distributor

Name.....

Company.....

Address.....

State..... Phone.....

TREND Toward Complete Typified by 1,000-Room

Multiple-unit installation charged with "FREON" REFRIGERANTS
air conditions 6,174,500 cu. ft. of space

The famous Rice Hotel . . . now modernized and completely air conditioned.

Complete air conditioning has become an integral part of modernization plans for many types of structures. Most property owners now fully realize the importance of comfort cooling and its influence on "consumers" in every field. Many are taking steps to obtain the added benefits of complete air conditioning. Another outstanding example of this trend is seen in the popular Rice Hotel modernization job in Houston, Texas.

A $3,000,000 MODERNIZATION PROGRAM

For many years, this imposing 18-story hotel provided air conditioning only in the west wing, public rooms, lobby and stores. However, in recognition of the advantages of complete air conditioning, management instituted a $3,000,000 plan to modernize and air condition the entire building. Consulting Engineer Reginald F. Taylor, after estimating the heating and cooling requirements of the 1,000-room structure, recommended installation of an 1800-ton chilled-water system. This consisted of three *Worthington* 600-ton centrifugal refrigerating systems charged with "Freon-11" refrigerant. The new equipment offers a "bonus" economy in that it occupies only the same amount of space as the old systems, although its capacity is nearly 6 times greater.

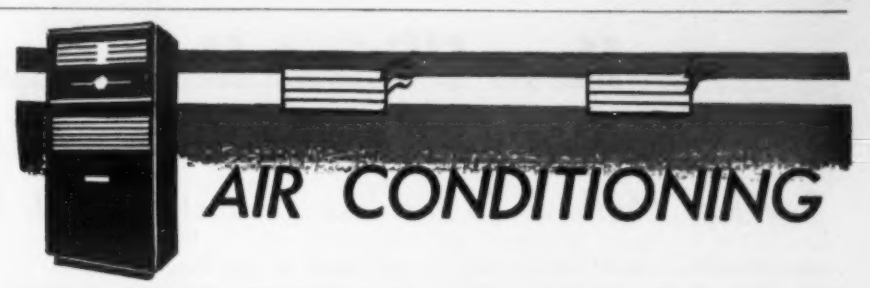
Three 100-h.p. chilled-water pumps

DU PONT
REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

"FREON" SAFE

Users Help Promote Air Conditioning

Testimonials on 'What Air Conditioning Does for Me' List Health Benefits at Home and Work, Cleanliness, Increased Summer Production



CLEVELAND — "Dial your own climate" is what some 30,000 of its customers are being advised by Cleveland Electric Illuminating Co., utility here, at the outset of the cooling season.

That suggestion is the title of an eight-page booklet the utility has prepared to point up the many advantages of air conditioning in the home, factory, office, and commercial establishment.

Its first such mailing piece on air conditioning, the utility is mailing 13,500 to commercial customers (including stores, offices, restaurants, etc.) and 3,000 to its industrial customers.

Another 10,000 will be distributed through the utility's residential sales department, and the balance will be sent to all members of the local electrical league.

Covers Home, Industrial, Commercial Applications

First section of the booklet is devoted to home air conditioning with the emphasis on window and console units; second section points out advantages of air conditioning to industry; while the last section features commercial applications.

Under the heading of "dial your own climate for better living," the booklet points out numerous advantages for having air conditioning at home:

"A good night's rest every night is yours to enjoy with modern air conditioning. Heat and humidity are locked out—can't disturb your sleeping comfort. You awake truly refreshed, ready to start your workday with the enthusiasm and composure so important to you and others. Ideal for those who sleep during daylight hours.

Homes Are Healthier Places

"Children and hay fever victims are protected from dust, dirt, pollen, and other air-borne allergies by modern air conditioning's clean, filtered air. Many asthma sufferers experience quick relief. Hot, humid weather makes your heart work harder—an air conditioned room gives your heart a chance to take it easy.

"You, your family, your friends can truly relax in leisure hours—whatever the weather. A modern air conditioning unit makes the climate that's best for your comfort, makes any home activity more enjoyable. Remember, cooling is only part of its job. Clean, filtered air is a year-round advantage. Many units also heat in moderately cool weather.

"Select temperature you desire! Set the dial and quiet electricity does the rest—automatically cuts refrigeration unit on and off as needed, circulates cleaned and conditioned air for best draft-free ventilation, removes excess moisture from the air.

"Have a heart with your heart! On scorching summer days nature's body-cooling process forces your heart to pump harder, push more blood to the skin surface. Heat and humidity can keep your circulatory system out of balance. Air conditioning keeps temperature and humidity normal, takes the load off your heart.

"Windows stay shut, dirt and noise stay out when the room is air conditioned. Infrequent filter changes replace day-by-day dusting chores—walls, woodwork, curtains stay cleaner. You can sleep or rest while protected from traffic noise, shouting children, or other outside distractions.

Economical, Too!

"Comfort for pennies a week! Average cost of electricity to operate a modern room air conditioner is only pennies a week. It's a big bargain in blessed relief from nature's temperature tricks. Plan now to dial your own climate for better living—this summer, every summer!"

The section on industrial use of air conditioning featured enthusiastic comments from three users:

"So much depends on the comfort of our assemblers. When an employe is annoyed or fatigued by high temperature and humidity, he can't be expected to give top-notch performance no matter how conscientious he may be," said the assembly foreman of a plant that produces oxygen regulators for the Air Force.

"I estimate that our production would drop 30 to 40% in summer months if we had to work without air conditioning."

Commented the president of a spring company:

"During summer months the temperature in our plant area often went uncomfortably close to 100°. Naturally it was hard to sustain our normal output in that intense heat. After the air conditioning units went in, we noticed a difference immediately. No matter what the weather, we could work straight through the day without feeling a trace of hot-weather fatigue."

"Now we keep the windows closed, keep the smoke and noise out, and keep cool all at the same time."

Cuts Production Costs

Added the head of a tool manufacturing concern:

"The operating cost of our air conditioning is 3¼ ¢ per hour, per employe—or less than 1% of the cost of labor and overhead in the plant. This investment returns three major advantages: (1) Cleanliness and elimination of moisture and rust problems; (2) Temperature control that greatly reduces tool resetting on close tolerance work; (3) Increase in production efficiency of 3 to 5% in the five summer months. It is quite evident that our air conditioning has proved to be a good buy. We consider it as much a part of an efficient plant program as adequate lighting, pleasant working conditions, and efficient equipment."

Summarizing the advantages which air conditioning offers industry, the utility's booklet emphasizes:

"Keep summer output up with modern plant and office air conditioning. Hot-weather production dips show their true waste factor when plotted against factory and office overhead costs, scheduling difficulties, delays, stock handling, and storage. Air conditioning wipes out production valleys, keeps work going at pre-set efficiency levels.

"Cost is low, gain is high! Operating cost of air conditioning is only a few pennies per man hour—often less than 1% of labor and overhead. Investment in this production tool brings high returns, protects quality, helps prevent costly errors due to worker fatigue.

Makes Workers More Efficient

"Work areas stay cleaner with air conditioning. Housekeeping and maintenance are reduced. Outside dirt, noise and distractions stay outside; windows stay closed; attention is focused on the job. Clean work areas have 'efficiency atmosphere' that works on the worker.

"Holds, recruits good employes! Air conditioned plants and offices score high in establishing and keeping good morale. Clean, comfortable working conditions build pride and self respect for employes and their families. Job loyalty is increased; exits, replacements, and unproductive training periods decrease."

Commercial users of air conditioning are also quoted in the booklet. The owners of a pharmacy, for example, are quoted:

"Our flat roof was a killer in summer until we put in air conditioning. Now we stay comfortable and our customers stay good customers. We've found that the unit traps a lot of dust, keeps our stock and cases looking better with less cleaning. Air conditioning really pays off on those sultry days when the soda bar is jammed and we're all working at top speed."

Said the owner of a dress shop:

"We've had our air conditioning unit two years. It's a must for good sales in summer weather—especially for a dress shop. Women can't be comfortable trying things on when it's hot and muggy. Air conditioning helps by keeping moisture out, makes our garments look fresh and crisp—they stay cleaner, too."

Added a restaurant operator:

"My customers feel better, eat more, and keep coming back. The girls get bigger tips, and I get bigger checks. Air conditioning is just smart business for the restaurant business. I don't know how we ever got along without it at our old location."

To these comments the utility appends the following:

"Comfortable customers are receptive customers! Air conditioning puts customers in a better buying mood, cures heat-wave irritations, makes it easier for you to make more sales. Shoppers appreciate air conditioned stores, select them, keep coming back.

It's Easier for Sales People To Sell, Customers To Buy

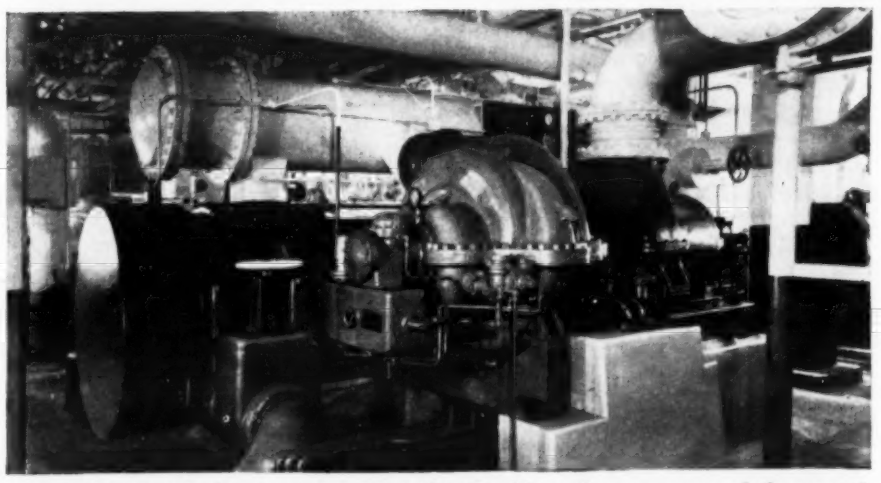
"Energetic salespeople sell more! Air conditioning helps store employes feel better, do better—whatever the weather. With tension-building heat and humidity gone, they find it easy and natural to take a more active, friendly approach to selling. When store air is always clean, fresh, and comfortable, salespeople are more productive, more likely to keep helpful and convincing personalities that mean so much to your business success.

"Cleanliness saves! Air conditioning reduces soilage, keeps merchandise bright and new. You save your stock, save on cleaning and maintenance. Restaurants and apparel stores can gain particular benefit from over-all cleanliness that comes with air conditioning.

"Business up all year! Air conditioning keeps stores in business on a higher year-round level—no summer sag. Air conditioned restaurants have extra appeal in summer when customers want to 'eat out' more frequently."

Final page of the booklet urges customers who want more information about air conditioning to call the utility for advice, and concludes with a partial list of commercial and industrial users.

Air Conditioning Hotel Modernization Job



Turbine driving *Worthington* 600-ton centrifugal refrigerating compressor in basement.

circulate 5,400 gallons of chilled water per minute through insulated piping to air conditioning units throughout the building. In winter, hot water is circulated in place of the chilled water. A pneumatic control system automatically operates the three-way bypass valves at each air conditioner to maintain proper temperatures, and automatic face and bypass dampers keep a rigid check on humidity.

THREE-ZONED ARRANGEMENT

To provide zoned air conditioning, the hotel has installed 3 units on each floor. In all, 75 separate units are used to air condition 6,174,500 cu. ft. of space. Air distribution is through wall outlets, with common returns through hallways.

These installations also supply efficient air conditioning for such large areas as the main ballroom, serving as many as 1300 people, and the spacious Petroleum Club. The Petroleum Club occupies the top floor of the Rice Hotel, and its appointments make it one of the most beautiful club rooms in the Southwest. No increase in refrigeration capacity was required when the club was constructed in 1951. In addition to the air conditioning units, the Rice Hotel uses two *Worthington* 25-h.p. units operated with "Freon 12" refrigerant to provide ice water.

Sparkling "Empire Room," where guests may dine and dance in air conditioned comfort.

Three condenser water pumps handle 7,200 gallons of condensing water which is passed, in series, through the refrigeration and steam condenser, and then back to a cooling tower atop the Hotel garage, two blocks away. To supply steam for heating and operation of all hotel utilities—and to power the *Worthington* steam turbines which drive the centrifugal refrigerating machines—three 15,000-lbs.-per-hr. boilers are utilized.

The "Rice" story points up the fact that more and more property owners have come to value the efficiency, economy and versatility of modern installations for complete air conditioning.

PROSPECT LIST EXPANDING

There are scores of prospects for complete air conditioning in every locality. Almost *any* structure that can benefit by air conditioning is worth placing on your list of prospective buyers. Include factories, office buildings, hotels, supermarkets, neighborhood stores, schools, theatres, clubs, auditoriums, apartment houses, private residences . . . the list is practically endless!

You build confidence and help insure satisfied customers when you recommend equipment operated with Du Pont "Freon" refrigerants. Explain that these refrigerants are safe . . . nonflammable, nonexplosive, virtually nontoxic . . . and are produced by laboratory-controlled methods that insure their purity and uniformity. "Freon" refrigerants help provide dependable air conditioning and refrigeration . . . contribute to the efficient, economical performance of the equipment. In addition, these refrigerants meet all building-code requirements. E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Div., Wilmington 98, Delaware.

Genuine Joe says:
"WAGNER BEARINGS are BEST..."
Wagner's 87% tin babbit-lined bearings are best because they have:
1. Extreme load-carrying capacity.
2. Excellent anti-seizure properties.
3. High resistance to corrosion by acids present in oil.
Wagner Electric Corporation
6671 PLYMOUTH AVENUE, SAINT LOUIS 14, MO., U. S. A.

EVAPORATIVE CONDENSER
by
KRAMER
Unmatched in the industry for its trouble-free operation.
2 to 10 ton models.
Write for Catalog R-225
KRAMER TRENTON CO. • Trenton 5, N.J.

REFRIGERANTS

KINETIC

"FREON" is Du Pont's registered trade-mark for its fluorinated hydrocarbon refrigerants.

More Efficient Meat Department

65% of Man-Hours Are Channeled Into Retail Cutting and Packaging; USDA Develops Methods To Increase Productivity with New Equipment, Layouts

Commercial Refrigeration

CLEVELAND—"Substantially more meat per hour could be prepared for retail sale by employes of many self-service meat markets through the use of techniques recently developed by marketing research specialists of the U. S. Department of Agriculture," says E. M. Harwell.

A member of the USDA staff, Harwell spoke at the 16th annual convention of the Super Market Institute here, giving preliminary conclusions of studies made by the Marketing and Facilities Research Branch of the Production and Marketing Administration in cooperation with three large supermarket organizations.

"These new ways to increase man-hour production include proper work methods, newly designed equipment, and more efficient layout," summarized Harwell, who said the complete detailed report will not be released by USDA for several months.

"Practical applications of the new work methods and equipment were made in the self-service meat departments of seven of the cooperating stores. Use of the improved systems led to a preliminary estimate of increased output in those operations averaging 23%," he said.

Reports on two phases of the meat handling studies, (1) receiving, blocking, and cutting and (2) packaging and displaying, are now being prepared for publication and should be available soon. Further study is being made of the over-all layout of these operations, and another report, which covers operations of service meat markets, also is being readied for publication. All the studies were made under provisions of the Agricultural Marketing Act of 1946.

"An analysis of labor requirements in typical self-service meat markets showed that two functions—retail cutting and packaging—accounted for 65% of all of the man-hours necessary in their operation. Most of the improvements developed through the studies were made in these operations," Harwell explained.

Cuts Smear on Power Saw

"In breaking down wholesale cuts of meat into retail cuts, a device was developed which removed the smear from each retail cut of meat as it was cut on the power saw, and increased productivity on the items cut on the saw by 22 to 33%.

"A new cutting table was designed and tested which brought all tools and materials within easy reach of the operator. Empty pans were stored at table top level, and the wrapping paper was suspended above the pans. Waste receptacles were placed on casters and located beneath the cutting table. Slots were provided in the table for waste disposal. The power saw was placed at right angles to the cutting table to minimize walking distances.

"It was found that retail cuts on boards or trays should be performed as a part of the wrapping operation rather than as a separate operation. As a separate function it means an additional handling of each package," he said.

Single Conveyor Used

"A single conveyor which carried unwrapped meat to the wrappers and wrapped meat to the pricing operation caused confusion and loss of productivity. Two conveyors, one above the other, to separate wrapped meat from unwrapped meat, were found to be little better because of the additional fatigue created by having the operators work at an akward level.

"Gravity conveyors on both sides of the wrapping station offered a solution to the problem of improved product flow—one conveyor feeding unwrapped meat to the operators and the other carrying wrapped meat to the pricing table.

"A new wrapping table was designed to increase wrapping productivity and reduce operator fatigue. With this 'easy-reach' table all materials were placed within arm's length of the operator, including pans on either side for wrapped and unwrapped meat. A new type of film holder for sheet cellophane was developed and incorporated in the improved wrapping table. This 'fold-over' wrapping film tray conserved storage space and facilitated grasping each sheet of film. A stool was provided at this operation for alternate sitting and standing," he further indicated.

"Two types of label printing machines were evaluated—the separate label printer and the combination scale and label printer. Both offered substantial savings in labor. In addition, the separate label printing machine printed complete labels from a roll of blank paper. This eliminated the need for a label supply for each commodity sold, and reduced label material costs by more than 50%," Harwell declared.

"Studies on four common types of pre-packaging scales showed one of these types to be slightly more productive, and employes made fewer mistakes in reading it.

Tare Attachments Cut Errors

"A tare attachment was developed to eliminate the need for physically weighing the packaging materials in making a tare adjustment. This device consisted of a pointer attached to the tare knob on the scale. A white card was inserted in a frame to the rear of the pointer and colored or numbered lines were drawn on the card to indicate the weight of the various tares. The operator needed only to turn the indicator to the proper line for each tare set.

"A pricing table was designed which incorporated the separate label printer and the scale which proved to be most accurate. A pan dolly rack designed to hold six pans of wrapped meat was used by the pricing operator for temporary storage after the product had been priced. Fewer trips to the display cases were necessary with the pan dolly rack. Previously, each pan was carried individually to the display area.

"Size of pan loads was found to be an important factor in market productivity. Larger pan loads mean less time per package for the many handlings in the market when a pan is used. The 12 by 30-in. pan was found to be superior to the 12 by 24-in. pan.

Principles of Good Layout

"A number of opportunities were found for improving self-service meat market layout. Designing a good layout consisted of typing together the successive operations in a market in a manner providing a smooth, continuous flow of product with a minimum number of handlings and a minimum amount of walking. To arrange proper layout it was necessary to follow these basic principles:

"(1) The cutting operation should be as near the cooler as possible.

"(2) Pans of product from the cutting operation should be placed on a gravity conveyor located next to the cutting table.

"(3) The gravity conveyor should connect the cutting operation with all wrapping stations.

"(4) A second conveyor next to the opposite side of the wrapping tables should connect each wrapping unit to the pricing operation.

"(5) The pricing operation should be as near to the center of the display cases as possible.

"(6) Display cases should be serviceable from the rear to eliminate interference with customer traffic.

23% Increase Achieved

"Data were obtained on market productivity for several months preceding and following the installation of the improved equipment and layout methods in the seven stores. Productivity, based on company record, increased from 19 to 31% after improvements were installed, resulting in the average estimated increase of about 23%.

"Installing proper meat market equipment and layout, however, will not in itself automatically bring the desired increased productivity. The potential results also depend on proper personnel retraining in the new methods and on the new equipment.

"MAKING SALES" IS NOT ENOUGH . . .

KEEP YOUR PROFITS UP WITH

COLDIN REFRIGERATORS

FEATURE THE LINE THAT GIVES YOU A SATISFACTORY MARGIN . . . PLUS FEATURES THAT MAKE CUSTOMERS BUY!

DAIRY & BEVERAGE WALL CASE
LOW TEMPERATURE FULL VISION DISPLAY
SPOTLIGHTER FULL VISION DISPLAY
FRONT SERVICE DISPLAY CASE
DOUBLE DUTY BUTCHER CASE
DOUBLE DUTY DELICATESSEN CASE
FORMICA TOP COUNTER & DISPLAY CASE
COMMERCIAL STORAGE FREEZER
FROZEN FOOD MERCHANDISERS
ANGLE FROZEN FOOD MERCHANDISER

DOUBLE DUTY BUTCHER DISPLAY CASE
MODEL DBM-8

Here's the Butcher case to feature for fast, fast refrigerator sales! Results in every market prove that the "retailer" wants no makeshifts, no trick refrigeration, no expensive operating costs. He wants you to deliver a Butcher case, one that will effectively refrigerate and display his merchandise.

Therefore, too, Coldin quality pays off in fewer callbacks, more satisfied customers . . . and more profits for you!

Available in 6, 8, and 10 ft. lengths.

These days your operating costs are higher — so you need the higher profit. Coldin offers the bigger pay-off on every sale. Important, too, you need the selling advantages Coldin gives you . . . the Coldin reputation for quality . . . the more-for-the money features that clinch sales on your floor.

Coldin NEW YORK

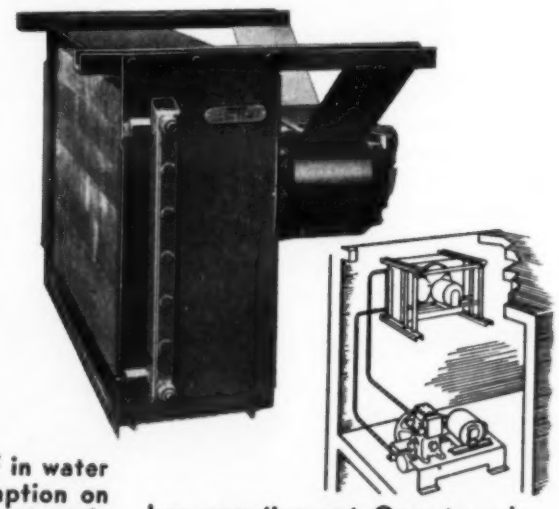
DEALERS — WRITE FOR CATALOG AND INFORMATION

YOUR KEY TO BETTER REFRIGERATION

COLDIN CABINET CO. INC.
2800 Webster Ave., N. Y. 58, N. Y. • CYpress 5-3311

Save Water with heat-x

AIR-AND-WATER COOLED COMBINATION CONDENSERS. FOR REMOTE INSTALLATION.



Quickly pays for itself in water saving. Water consumption on year 'round basis approximately 5% of water cooled condenser usage.

Flexible installation. Can be mounted in any location, indoors or outdoors.

Full water cooled capacity. Compressor can operate at full water cooled speed.

Request free descriptive bulletin.

Low operating cost. Operates only when compressor is running.

Low maintenance cost . . . no accessory equipment, no open water system, no chemical concentrations in water.

Cleanable water tubes.

No breakdown losses. Can operate on either air or water in emergency.

THE HEAT-X-CHANGER CO., Inc.
BREWSTER - NEW YORK

Nursery Rhyme Contest and Gift of $100 In Food Lure Freezer-Food Plan Prospects

DETROIT—A $2,000 nursery rhyme contest and a gift of $100 in frozen foods were gimmicks used to promote two freezer-food plans here recently.

The Alsco food club plan is staging the nursery rhyme contest, offering 17 prizes for the best last lines to the rhyme. Top prize is a 15.7-cu. ft. United upright freezer containing $100 worth of frozen foods. Second prize is the freezer without the food. Next 15 prizes are $50 worth of frozen foods.

The rhyme is as follows:

"Young Mother Hubbard
Went to the Cupboard
And Smiled at a Wonderful Sight,
Her United Freezer was There
With Food to Spare
....."

The last line is to rhyme with "sight" and this sample was given: "Her Alsco Plan's a Delight."

As a "special bonus" the "earliest entrants" would receive a free illustrated 36-page booklet on "Good Things to Eat."

Judges in the contest are Hugh Dunbar, vice president of the City Bank; Charles Edgecomb, Wayne county auditor; and Arthur Koscinski, assistant prosecuting attorney. Winners are to be selected on the basis of originality, sincerity, and aptness.

The $100 frozen foods offer was made by Edco Products Co. with the purchase of an 11-cu. ft. upright Norge freezer at $429.95. It was made, the company said, "by special permission of the manufacturer."

In addition, the firm's advertisement offered purchasers "tremendous food savings direct from Edco's provision plant." As examples the company listed U. S. graded choice beef fronts at 34 cents per lbs., sides 43 cents per lb. and hinds at 53 cents per lb.

The advertisement emphasized that "small down payment delivers, easy terms arranged."

'Ollie' Hasner Appointed As Vice President of Manufacturing by Ryan

HOPKINS, Minn.—S. C. Ryan, president of Ryan Industries, has named Oliver "Ollie" B. Hasner to the position of vice president in charge of manufacturing.

Oliver B. Hasner

Ryan Industries manufactures the Ryan Freeze Pantry, an upright food freezer, and also produces private label freezers for national concerns. "Hasner is known nationally as one of the pioneers in the designing and building of upright freezers, Ryan said.

He came to Ryan Industries from Amana Refrigerator, Inc., in July, 1952, and planned and supervised the present assembly line of the Ryan company, which daily produces about 100 units in the plant at Hopkins.

Hasner was born in Trenton, New Jersey, and received his early technical training in the east, attending the School of Industrial Arts and Drexel Technical College, both in Philadelphia. For five years he was with C. V. Hill Refrigerator Co. of Trenton, N. J., serving as an engineer in development work.

He has also planned and supervised installations of many national refrigerator concerns.

To make a "GOOD CONNECTION" Call RIVERSIDE!

This rubber-encased connector links a refrigerator relay with a Fusite hermetic terminal, which is welded to the compressor. Originally, the connector had a brittle plastic case which presented various problems. Our engineers suggested a molded rubber case, also redesigned the contacts. Resulting improvements: (1) Greater structural strength, (2) Elimination of damage in handling, (3) Faster assembly, (4) Better electrical contact, (5) Higher "pull-out" rating. And if you have problems involving the design or production of similar or more intricate assemblies, you too, can "make a good connection!" Just write or call us, without obligation, for engineering recommendations.

RIVERSIDE MANUFACTURING AND ELECTRICAL SUPPLY COMPANY
10233 Michigan Ave., Dearborn, Mich., Tiffany 6-6800
WIRING HARNESSES AND ASSEMBLIES • CORD SETS • HEATER AND EXTENSION CORDS • SWITCHES • MOLDED RUBBER PRODUCTS

Fitzgerald To Be Amana Regional Sales Manager

AMANA, Iowa—Thomas J. Fitzgerald, a veteran of 30 years in the appliance and machinery field, has been named to the new position of south central regional sales manager for Amana Refrigeration, Inc., manufacturer of home food freezers.

T. J. Fitzgerald

Fitzgerald will work with distributors and their salesmen in southern Illinois, Missouri, Kansas, Arkansas, and the Memphis and Nashville, Tenn. trading areas. This new south central region becomes the ninth territory in the firm's sales organization.

The new regional sales manager has been a sales training specialist since he joined Amana about a year ago.

Building Dedication Climaxes 13 Months Of Growth for Food Plan In Colorado

DENVER—Climaxing a 13-month growth in Denver, a new building here for the Colorado Food Plan was dedicated recently.

Top figures in city and state government and business were invited to take part in the ceremonies.

The food plan was founded in Denver April 1, 1952. Starting with 24 customers the first month, the plan now has more than 2,200. The company president, Elton Parks Jr., said the firm's ideas "go beyond food plans and as we provide more and more service for the people of Denver, we ourselves will grow."

New headquarters for the plan are provided in the one-story brick and glass building, 60 ft. by 105 ft. The front is of Roman red brick and buff colored face brick. Accenting the modern design is extensive use of color—tinted plate glass.

An electric kitchen on a raised stage in the auditorium section is one of the interior highlights. Cooking classes for the public will be conducted there by staff home economists.

Accommodations for food counselors and space for clerical and executive functions are provided in the administrative section of the building. The rear section includes facilities for servicing home freezers sold through the plan.

A 10-fold increase has been made in the staff of the food plan since it started operations. Parks said the concern had been "guided always by our determination to build a permanent concern that we can believe in and that our customers can believe in as an organization serving them."

John S. Ward, vice president and sales manager, joined with Parks in founding the food plan here. Ward came to Denver after a successful record with freezer-food plans at Phoenix, Ariz.

LOOK! the newest design in The Leadership Line

COOLERATOR'S NEW
12.7 cu. ft. UPRIGHT FREEZER

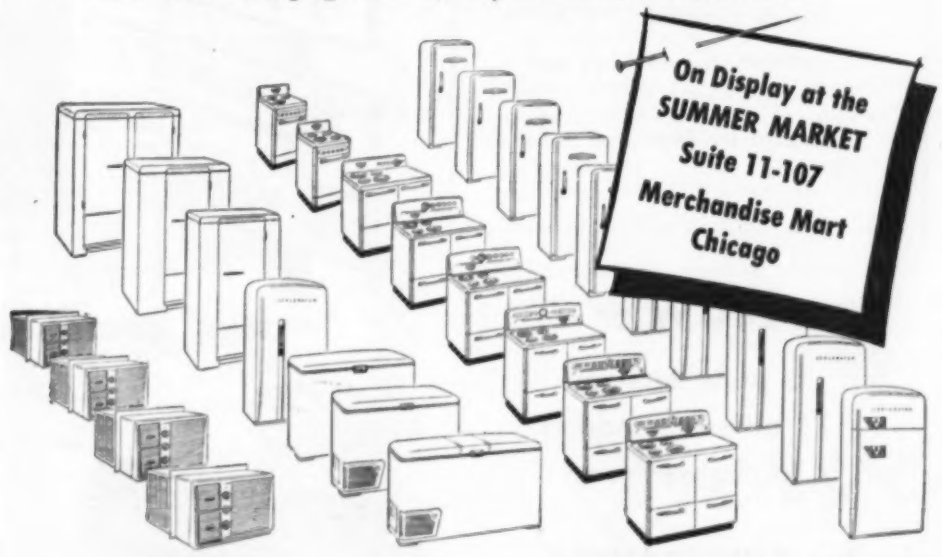
UFB-125

at the LOWEST PRICE per CUBIC FOOT ever offered in its class!

MORE CONVENIENCE AND ECONOMY FEATURES IN COOLERATOR'S 12.7 CU. FT. UPRIGHT FREEZER:

Now just when everybody wants it—Coolerator's newest upright freezer—sized, styled and priced to sell on sight! It's space-saving, it's bulk-holding and it's quality-built. It *completes* the Leadership Line of freezers—both chest and upright—all the way from 10½ to 32 cubic feet!

- Four roomy shelves with fast-freezing plates
- One adjustable shelf for complete interior flexibility
- Compact! Requires only 31½" floor width yet holds up to 445 lbs. of food
- Fits in any kitchen. Matches up with Coolerator refrigerator
- Inner door racks provide extra storage space
- "Cupboard convenience" for fingertip selection
- Famous Zerolator cold-making unit with 5-year warranty
- Special FREE 5-year $150.00 food warranty



4 ROOM AIR CONDITIONERS | 4 UPRIGHT 3 CHEST-TYPE FREEZERS | 8 ELECTRIC RANGES | 10 REFRIGERATORS

See your Coolerator distributor for details about Coolerator's *complete* freezer selection and other major appliances in the Leadership Line. Or write directly to:

THE COOLERATOR COMPANY, Duluth 1, Minnesota

The Leadership Line by Coolerator
An IT&T Associate
Electric Refrigerators, Ranges, Freezers and Room Air Conditioners

New Officers of Detroit Section of ASRE

IN THE SPRING, a young man's thoughts may be one thing, but members of the many local chapters of various societies serving the industry also have ideas about electing officers for the 1953-54 season. Perhaps typical are the new heads of the Detroit ASRE section: Roy Burns, vice chairman; David S. Falk, chairman; Jack Baragar, assistant secretary-treasurer, and Stanley Janzarek, secretary-treasurer.

First Quarter Washer Sales Top '52 Period

CHICAGO — First-quarter factory sales of standard-size household washers totaled 949,902 units, up 32% from the 718,283 sold in the like period a year ago, according to the American Home Laundry Manufacturers Association.

Sales in March amounted to 345,989 units, compared with 248,431 last year, a gain of 39%. Compared with the 326,604 units sold in February, March sales increased 6%.

Sales of automatic tumbler dryers in the first quarter rose 29%, totaling 168,989 units, against 130,822 in the corresponding period of 1952. March sales totaled 49,593, 20% above the 41,161 units sold in the same month a year ago, but down 13% from February, when 57,136 units were reported sold.

Ironer sales in the first quarter amounted to 63,049 units, up 33% from last year's first three months. Sales in March were up 15% from a year ago but declined 29% from February.

Freezer Survives Fire That Destroyed Home

FIRE SURVIVOR is this Deepfreeze home freezer. Unit was received by Loris Nelsen, product service manager of Deepfreeze Appliance Div., Motor Products Corp., after fire destroyed its owner's home. The freezer protected its food contents until firemen located it among debris in basement of the destroyed home. Food was still frozen even though the unit had been without power for 24 hours.

Customers Honor Trinkley for 48 Years Service

PITTSBURGH—Karl A. Trinkley, retiring Pittsburgh factory representative of the Westinghouse Electric Corp.'s Electric Appliance Div., was honored recently by a number of his customers for more than 48 years of continuous service with his company.

On hand for the luncheon festivities were James E. Hugo, central district manager for the Electric Appliance Division, who presented Trinkley with a wrist watch.

Also present was Earl P. Hartley, who is the district's sales promotion manager.

Born in Pittsburgh in 1888, Trinkley started with Westinghouse in 1905 as an office boy in the company's old headquarters at 9th and Penn Avenues, which also housed the office of George Westinghouse, founder and president of the company.

During his entire career with Westinghouse, Trinkley was never transferred from Pittsburgh, his native city.

Thor Names New Outlets In Grand Rapids, Lansing

CHICAGO — Thor Corp. has announced the appointment of two new distributors in Michigan.

Buhl Sons Co., Grand Rapids, succeeds State Distributing Co. of that city.

Garlock Sales Co., Lansing, has been appointed to succeed State Distributing Co. of Flint, according to the announcement.

G-E Seeks Refrigerator Prospects In Outer Space

LOUISVILLE, Ky. — Toy space helmets and rocket ray guns are being used as giveaways to promote General Electric refrigerators.

The helmets and guns have been made available by G-E major appliance distributors to dealers for distribution to children who bring their parents into a dealer's store for a refrigerator demonstration.

Announcement of the giveaways was made in connection with the "Pimlico Preakness" sales emphasis period on refrigerators in the three-month Diamond Anniversary Sweepstakes sales campaign for all G-E major appliances during May, June, and July.

Made of lightweight, pliable, coated cardboard, the toy helmets and guns are multi-colored, carry prominent G-E identification, and are easily assembled.

K. G. Roe, sales manager of the household refrigerator department, said the ray gun uses cardboard bullets and is in reality a blow-gun, operating like a pea shooter. The blowing end is inserted into a hole in the space helmet in the area of the mouth.

The giveaways are being featured in national and local advertisements and in window displays, streamers, and similar promotional material.

Dates Set for Pittsburgh Industrial Electric Show

PITTSBURGH — The Electric League of Western Pennsylvania announces that the fourth Industrial Electric Exposition will be held at the William Penn hotel Oct. 6-8.

On display will be all types of electrical equipment, apparatus, and supplies used in industry. A "kick-off" luncheon will be held Oct. 6.

Norge Electric Range Will Retail at $179

CHICAGO—A new Norge low-cost electric range, model PE-10B, to retail for $179, was announced recently by H. L. "Red" Clary, vice president in charge of sales of the Norge Div., Borg-Warner Corp.

The unit is designed for families who want to switch to electric cooking, but can't afford more deluxe electric ranges, he said. The PE-10B can be converted to automatic operation at slight cost.

The full-width range has a "blended heat" deluxe oven, "charcoil" smokeless broiler, three surface units with monotube twist-out elements, a deepwell cooker, and seven cooking speeds.

Construction features include a one-piece top and backrail, titanium porcelain enamel finish throughout, and 4 cu. ft. of storage space.

Dimensions of the PE-10B electric range are: 38 in. wide, 27 in. deep, 36 in. high to cooking top, 47½ in. high to top of backrail. Oven is 16 in. wide, 20 in. deep, and 15½ in. high.

The new range joins the Norge line between the model E-2A apartment-size range, retailing for $169.95, and the full-width model E-10A, retailing for $199.95.

Plumbing, Heating Meeting Set for N. Y. Sept. 20-23

WASHINGTON, D. C.—The second annual convention of the American Institute of Wholesale Plumbing & Heating Supply Associations, Inc. will be held Sept. 20-23 at the Waldorf-Astoria hotel in New York City.

All hotel reservations must be made through the institute, 402 Albee Bldg., 1426 G St., N. W., Washington, D. C. Advance registrations must be made to secure hotel reservations. The registration fee is $17.50. Checks should be made payable to E. L. Pugh, treasurer.

Dealers! Servicemen!

Step up sales and profits with genuine

FRIGIDAIRE Quickube Ice Trays

Only trays with "Double-Easy" Action

- Fingertip tray release
- Cubes release trigger-quick – two or a trayful
- Sturdy aluminum trays and grids
- Colorful ice blue and gold models

Sizes to fit most every refrigerator — regardless of make, model or age!

Every refrigerator owner is a prospect for Quickube Trays — one or a complete set. They'll sell fast at bargain prices. And, watch trade-ins move faster, too, when you add Quickube Trays for a "dress up" touch. Your customers know about Quickube Trays — the only ice tray with "built-in" tray *and* cube release — the original, most widely advertised, *best* automatic ice cube tray on the market. Lay in a good stock of all types and sizes *now* — during the peak selling season. Remember, they're warranted for satisfaction and quality by the maker — Frigidaire. See your Frigidaire Parts Distributor at once — there's one near you!

Quickube Trays, like all genuine Frigidaire parts, are warranted to give lasting, satisfying service.

Always specify — always use — genuine precision-built Frigidaire Parts, Accessories.

Now —

5 popular sizes
11 different models
to choose from!

Quickube Trays are made only by FRIGIDAIRE!

- Model DH-3A
- Compact, beautiful
- High efficiency
- Light, Dependable

– and you'll buy VICTOR today!

...Send for details of this Victor Dehumidifier and other items in the Victor line that mean More Sales... More Profitable Sales for You

Guaranteed by Good Housekeeping

Victor

VICTOR PRODUCTS CORPORATION
HAGERSTOWN, MARYLAND
MANUFACTURERS OF THE FAMOUS VICTOR QUICKFREEZERS

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

average motorist (with a medium-priced car) puts out about 10 cents a mile, based on 12,000 miles a year.

What has happened to driving costs recently? Plenty.

Today that same motorist with a comparable car is spending about 14½ cents a mile.

Assuming that our average motorist drives to work and parks in a parking lot, the following figures show what he's spending by the year:

Depreciation on $3,200 car at 20%	$ 640.00
Insurance	180.00
Gasoline for 12,000 miles, 15 miles to the gallon: 800 gals. @ 30¢ (regular)	240.00
City and state licenses	25.50
Oil—6 changes: 36 qts. @ 40¢	14.40
Grease	10.00
Anti-freeze	7.50
Repairs, motor tuning and miscellaneous	100.00
Parking	300.00
Total	$1,517.40

This total, divided by 12,000 miles, gives a per mile cost of 12.64 cents.

Now if this Mr. Average Car Owner is buying his car on time and financed $2,000 of the purchase price, he is paying $100 a year in interest.

Supposing also he has the car washed every other week, that adds up to $52 for the year and if he has two polish jobs in the year, that means another $40.

That adds another 1.6 cents a mile in cost, for a total of a little over 14 cents a mile. If fewer than 12,000 miles a year are driven, the cost per mile increases, as depreciation, insurance and other fixed expenses are spread over fewer miles.

If more than 12,000 miles are put on the car, the per mile cost decreases.

Another item that adds up in a year's time is parking meter fees. With more and more meters in the neighborhood shopping districts, those nickels and pennies can amount to enough in the course of a year to buy a new tailor-made suit.

Rudy Lotz, Nacilbuper

Twenty-five years ago Rudy Lotz was "Dope's" boss on a Champaign, Ill., daily newspaper. Today Rudy is comptroller of the Virginia Smelting Co., and a professional (even if transplanted) Southehn Gentleman and fahmah, suh. Quite a switch.

However, Mistuh Lotz does revert to type occasionally by publishing an extraordinary missive entitled "The Nacilbuper" (Republican spelled backwards). We quote (without quotation marks) from a 1953 issue:

PARENTS PARLOR—YOU THINK YOU HAVE PROBLEMS

Our number three boy has started a new attack upon my disposition. Armed with stamped envelopes filched from my desk, he covers all the ads looking for the magic word "FREE." Never reads further, or doesn't know what "TRIAL" means. Each mail brings more junk—humane rabbit traps, stamps galore, flower seeds, vegetable seeds, pictures, autographs, books. Got one for me at Christmas, a book on accounting. Must have known how I needed it—but not for 10 dollars. Returning the stuff is a full time job, and besides we are now on every sucker list in the country. Since one of his chores is to burn the paper, we are now hopeful that the mounting flood will discourage him.

Somehow or other that reminds us of advertising designed (through coupons, etc.) to produce "inquiries."

The pulling power of an advertisement is open to question if the advertiser merely **counts the coupons** and so-called "inquiries."

Why? Because the world is full of "free loaders,"—and kids, plus lonely people—who just love to get a lot of mail.

"Stories of the Week" In Handy Form

In response to hundreds of requests from AIR CONDITIONING & REFRIGERATION NEWS subscribers, the conductor of its "Inside Dope" column has collected and grouped his best "Stories of the Week." They are now available in convenient book-form for your reading and working pleasure. The book is entitled: "You'll Love This One."

Everyone will enjoy reading this book, we hope, but for the salesman—and for anyone who may be called upon to "say a few words" at a meeting—it should have especial appeal.

Here's why: this book of good stories *you* can tell is printed on thin paper, bound in flexible leatherette, and *designed to fit neatly into your inside coat pocket.*

While waiting in an ante-room to see Mr. Bigdome, the sales representative can thumb through it and pick out four or five pertinent jokes which are guaranteed to put his prospect in a good mood.

The man about to make a speech—or one who figures he may be asked to rise and shine extemporaneously—can consult it surreptitiously while the toastmaster is doing his stuff. Although it's jam-packed with grand tales, it isn't bulky. Rather, it's unobtrusive. Looks more like a leather wallet than a book.

You can be the life of the party if you've memorized some of the anecdotes in this book. Everybody loves a good story well told—and all the jokes in this book have been tested on tough audiences, both large and intimate, by the author.

Within its 236 thin-paper pages more than 200 sure-fire laughs are presented. You can use it profitably, and so can your friends. It's handsomely turned out, and will make an appreciated gift anytime.

PRICE: $1.00

(Write for quantity discounts on 5 or more copies.)

Order directly from: *Business News Publishing Co., 450 West Fort St., Detroit 26, Mich.*

BUSINESS NEWS PUBLISHING CO.
450 W. Fort St., Detroit 26, Mich.

GENTLEMEN:

Please send me ..... copies of "You'll Love This One" at $1.00 per copy. ☐ Check enclosed. ☐ Please bill me.

Name .....

Address .....

City ..... Zone ..... State .....

6-8-53

Dryomatic Corp. Adds Four Representatives In Midwest

ALEXANDRIA, Va.—Appointment of several new sales and service representatives to increase coverage in the Middle West has been announced by Anthony Hass, vice president and sales manager of the Dryomatic Corp. here, manufacturers of adsorption-type commercial and domestic dehumidifiers. The new appointees, and the territories served, include:

O. C. McNairn, Cleveland, for the Cleveland - Akron - Canton area.

Alvin R. Close, Toledo, for northwestern Ohio, west of Mansfield.

Indiana Weathermakers, Indianapolis, covering central Indiana.

Charles E. Allen, Grand Rapids, Mich., for the state of Michigan.

Complete Air Conditioning Scheduled for N. Y. Hotel

NEW YORK CITY—The Weylin hotel here will be completely air conditioned under a $200,000 improvement program, according to Theodore R. Archibald, manager.

Among other things, the project calls for connection of the two separate buildings that make up the hotel. Hallways joining the two wings will be cut through two room suites in one building on 14 of the hotel's 16 floors, making one of the rooms larger and the other smaller. The latter space on each floor will be used to house central air conditioning units.

Guests will be able to select the temperature desired through use of controls in each room.

Pastel Interiors Are Practical Now!

Model Home In Philadelphia's First All Air Conditioned Section Shows How It's Done

PHILADELPHIA — Constructed as the sample house in Philadelphia's first development with year-round air conditioning included as an integral part of each home, "Air Fashion House" was opened to the public recently for a six-month period of inspection.

The house, located on Montgomery Ave. four-tenths of a mile past Rosemont college, was constructed by Madison Builders, Inc. Herman Goldner Co., local air conditioning distributor for Servel, Inc., put in the 3-ton air conditioning system.

Air Fashion House, situated on ½-acre of land, has a basic layout of four bedrooms and two bathrooms downstairs and three expansion rooms upstairs that may be utilized as additional bedrooms and a bath. One of the downstairs bedrooms is decorated as a nursery and another is converted to a television room.

Built with fine detail and workmanship in traditional colonial style with special handcrafted features, the basic home is priced at $42,500. With completed second floor bedrooms, a price of $46,000 is quoted.

Air conditioning equipment and installation costs raised the over-all price only slightly above what it would be if a conventional heating unit had been installed, according to the builder. Over a period of time, savings in upkeep should more than offset that cost, he added.

The all-year system cools in summer and heats in winter, circulates the air and automatically regulates the humidity and filters the air clean in all four seasons. It will take as much as 30 gals. of water out of the house's atmosphere in a single summer day of muggy Philadelphia weather.

The air conditioner itself is located at one end of the 60-ft. cellar. Nearby is a gas-fired water heater—a 45-gal. Servel unit.

The kitchen is finished in natural hardwood cabinets that fit into furred walls. Work surfaces have heat resistant plastic tops in the same design as the four-seat lunch bar.

Appliances in the kitchen include an 11-cu. ft. Servel "Ice-Maker" refrigerator, an automatic Magic Chef gas range, a Calcinator gas incinerator, a Hotpoint dishwasher, and a 9-cu. ft. Servel home freezer. The laundry unit is equipped with a Bendix automatic washer and a Bendix gas dryer.

Taking full advantage of the air conditioning, Evelyn DeVries, home fashions coordinator for Strawbridge & Clothier department store, decorated the home with "ice cream colors" and delicately textured fabrics. Protected by air conditioning, she considers them just as practical as the darker hues.

JUST ASK US!
Turn to "What's New" Page for useful information on new products.

● Dealers who sell Servel *All-Year* Air Conditioning have a minimum of service worries.

Most air conditioning service calls are for work on pressure leaks, motors, compressors and pressure-reducing valves in the cooling system—troubles that are impossible with Servel because Servel's unique "no moving parts" design eliminates these potential trouble-makers.

A recent analysis of 1117 service calls on refrigeration equipment of various makes* showed that in 852 cases (76.3%), the trouble could *not* have occurred with the Servel absorption refrigeration unit, because the Servel cooling system is not pressure operated. The unit is factory-sealed, has no compressor—has *no moving parts.*

No wonder Servel has such a powerful sales appeal! No wonder dealers and customers alike choose Servel for long-life lasting satisfaction!

Right now is the time for you to look into the big profit possibilities that Servel *All-Year* Air Conditioning holds for *you.* Remember, year-'round air conditioning is the fastest growing new development in the entire home-building field . . . and Servel is way ahead with more installations than any other make.

Write today for all the facts on your profit opportunities with Servel *All-Year* Air Conditioning. Address Servel, Inc., Dept. AC-6, Evansville 20, Indiana.

Servel

Heats and cools with gas or oil

*From a survey conducted among Refrigeration Service Engineers Society members and reprinted in *Air Conditioning and Refrigeration News.*

The name to watch for great advances in — **AIR CONDITIONING ✓ REFRIGERATION**

IDEAL
Speed-Freeze
PRODUCTS

BEVERAGE COOLERS AND INSTANTANEOUS DRAFT BEER COOLERS.
(With Refrigerated Faucets)

WRITE
IDEAL COOLER CORPORATION
2953 EASTON AVE • ST. LOUIS 6, MO.

Airtemp Appoints F. G. Hill Kansas City Regional Mgr.

DAYTON—F. G. Hill has been named Kansas City regional manager for Chrysler Airtemp Sales Corp., J. F. Knoff, Airtemp vice president and general sales manager, announced.

F. G. Hill

Hill, a district manager in the Kansas City sales office for the past three years, replaces T. U. Cowger, who recently resigned. Hill was associated with the sales department of Dallas Lone Star Gas Co. from 1930 to 1948.

Prior to joining Airtemp, he was with the western regional sales group of the Advance Furnace Co.

This Store's Really Sold on Merits of Air Conditioning

BUFFALO — Adam, Meldrum & Anderson Co., leading department store here, recently ordered installation of eight 7½-ton Worthington packaged air conditioners in its L. B. Smith Plaza branch.

This will be the fifth outlet of the company to be air conditioned. In 1949 and 1950 the firm installed a total of 26 package units to air condition its main store. Last year it installed 18 Worthington units in three of its branch stores.

Worthington distributor here is Davis Refrigeration Co., Inc.

Carrier Corp. Net Profit, Sales Rise In 12 Months

SYRACUSE, N. Y.—Net profit of Carrier Corp., air conditioning and refrigeration equipment manufacturer, for the 12 months ended April 30, 1953, was $4,827,126 or $4.48 per common share, as compared with $3,836,820 or $4.19 per common share for the preceding similar period.

During the period under review, completed sales totaled $141,602,860 and new orders were booked in the amount of $167,612,140. The comparable figures for the 12 months ended April 30, 1952, were $85,044,351 and $74,973,152, respectively.

On April 30, 1953, the corporation had a backlog of unfilled orders amounting to $60,788,408 as compared with $34,779,128 a year earlier.

The above booking and backlog figures are exclusive of the unshipped portions of government contracts for equipment unrelated to Carrier's normal production, which totaled approximately $107,000,000 on April 30, 1953, as compared to $50,000,000 a year earlier.

Before income and excess profits taxes, Carrier earned $13,677,126 during the 12 months ended April 30, 1953. The comparable figure for the corresponding period a year earlier was $10,932,750.

Income and excess profits taxes per common share for the two periods were $8.68 and $8.19, respectively. Earnings and tax figures have been adjusted in each instance to reflect retroactive changes in previous tax accruals.

Commenting upon current earnings and related matters, Cloud Wampler, president of Carrier Corporation, stated that during the first six months of fiscal 1953 deliveries in the amount of more than $33,000,000 have been made under extraneous defense contracts.

He also pointed out that profit margins on practically all classes of the company's business were lower than a year ago and that costs are still mounting.

Federal Electric Products, Pacific Electric Consolidate

NEWARK, N. J. — Merger of Federal Electric Products Co., with headquarters here, and Pacific Electric Mfg. Corp., with executive offices in San Francisco, has been announced by T. M. Cole, president of Federal Electric and J. S. Thompson, president of Pacific Electric.

The merger knits two major manufacturers of electrical equipment, with Federal Electric's products primarily of the low voltage type for industrial and home installations, and Pacific Electric's primarily of the high voltage type for long distance transmission of electrical power.

Sturtevant Names New Distributor In Scranton

HYDE PARK, Mass. — Albert E. Peters Co., of Scranton, Pa., has been awarded a franchise as distributor for Westinghouse self-contained and field-assembled air conditioned equipment, it was announced by W. B. Cott, air conditioning sales manager of Westinghouse Electric Corp.'s Sturtevant Div.

Headed by Wm. T. Peters, the firm has been associated with the heating, ventilation, and air conditioning business in the Scranton area since 1946.

THREE OF THE STORES here were appliance stores. ABC Appliance Co. (far left) became a hole in the ground as roofs, floors, and walls collapsed into basement.

AN ESTIMATED 150 cooling towers were ripped from roofs even in areas where building damage was light. Job of rebuilding has begun with service firms working round-the-clock.

Waco Dealers (What's Left of Them) Dig Out Of Rubble, Service Firms Restore Systems

WACO, Tex.—What happens to refrigeration and appliance dealers, and service companies, when a tornado tears through a city of substantial size?

A good case history of what happens was furnished by the tornado that smashed into Waco, Texas on May 11. The screaming wind lashed into the downtown district without warning, and laid waste some four square miles of the shopping area. The time was 4:35 p.m., when many stores were crowded with customers.

Windows burst out of a hundred stores as suction generated by the tornado literally fragmentized them, this followed by toppling walls, the caving-in of roofs, and folding in of multi-stored structures. Within seven minutes time, 105 persons had been killed, and hundreds of others injured.

The R. T. Dennis Co., a five-story building at one of the main downtown street intersections, collapsed to the ground. Among the dead found in this building were Rush Berry, a pioneer appliance retailer in Waco, and his son Edward Berry, who was also in the appliance business.

Other dealerships on Austin St., main shopping avenue, were shorn of signs, all window glass, parts of roofs, and deluged with a torrent of rain which followed the twister. Included were Stover Appliance Co., Maytag Appliances, Clifton-Simpson Hardware Co., Dixie Appliance Co., and Elkins Appliance Center.

Even worse was the carnage along Franklin St., one block west, where many older buildings housed appliance dealerships. Here an entire block went to the ground, killing most of the occupants, with many still buried beneath tons of brick and rubble.

ABC Appliance Co., a two-story store, became a hole in the ground as walls, roof, front and all caved into the basement. Klein's, a smaller store, suffered almost as bad a fate as the roof fell in and the entire front was ripped away.

The huge Montgomery Ward store at 3rd and Austin was condemned for razing as it lost half of its roof, every bit of glass, and upper floors listed dangerously.

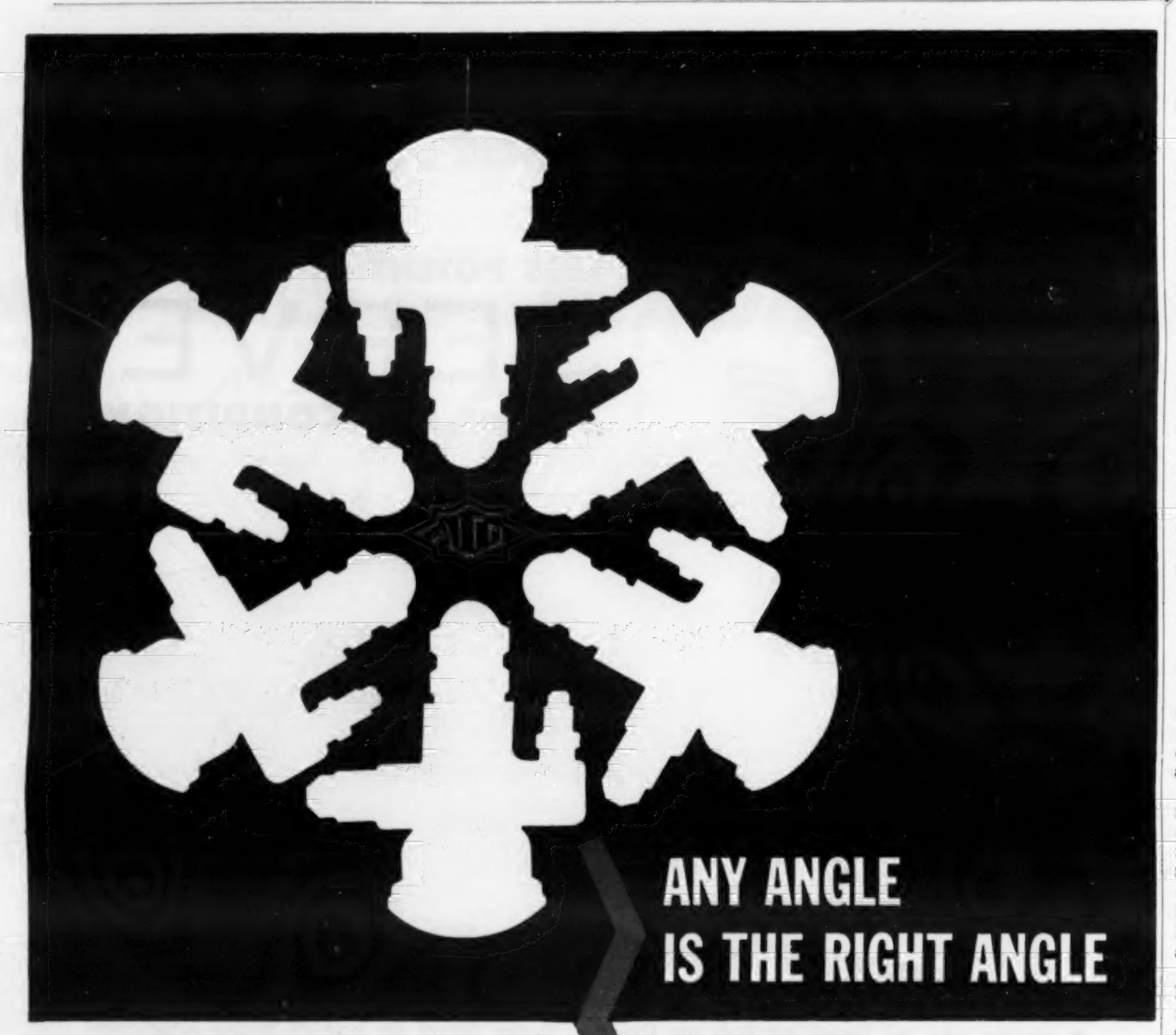
Every refrigeration service firm began working round-the-clock shifts, as cooling towers from hundreds of air conditioned buildings pitched into the street, crushing automobiles in many instances.

Although current was swiftly restored, no air conditioning equipment was capable of operation anywhere in the downtown district, with an estimated 150 cooling towers jerked from their moorings.

Similarly, foodstores were without refrigeration, and either transferred their meats and perishables to other stores out of the area, or donated it to feed the thousands of men who fell to on rescue operations.

Texas refrigeration wholesalers burned the midnight oil shipping in the required equipment to replace that lost to the tornado.

As a result, almost every employe of refrigeration service and contracting firms was going without sleep as the digging out process continued.



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IS THE RIGHT ANGLE

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ALCO 402 THERMO VALVES

You can mount Alco 402 Valves in any position that's handy... in any location that's easy to reach.

Reason: They're liquid charged and work equally well *upright, sideways, upside down*... in or out of the refrigerated area.

Easy to install—**YOU SAVE WORK**
Simple to service—**YOU SAVE TIME**
Pressure limiting—**YOU SAVE MOTORS**
Compact size—**YOU SAVE SPACE**

SEVERAL CONVENIENT SIZES NOW AVAILABLE!
Freon-12—¼, ½ and 1 Ton
Freon-22—.4, .8 and 1.6 Tons
Methyl Chloride—½, 1 and 2 Tons
ALCO 402—THE SMALL-FIXTURE VALVE—ENGINEERED FOR SERVICE ENGINEERS

SEE YOUR ALCO WHOLESALER

ALCO VALVE CO.
853 KINGSLAND AVE. • ST. LOUIS 5, MO.

Designers and Manufacturers of Thermostatic Expansion Valves; Evaporator Pressure Regulators; Solenoid Valves; Float Valves; Float Switches.

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Keep them in stock. Servicemen will pick up adapters and motors, carry them in their cars, and complete service on the job in one call. Eliminates delay of having motors away for rebuilding. Adapters are easy to install, fit any base. No rotor shaft too long or too short. They also bring you more sales in motors, belts, pulleys, controls, etc.
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Quality speaks a language everybody understands. Wholesalers, dealers, and users alike know that *Larkin* means quality—of workmanship, materials and performance.

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Manufacturers of the original Cross-Fin Coil • Humi-Temp Units • Frost-O-Trol Hot Gas Defroster • Evaporative Condensers • Cooling Towers • Air Conditioning Units and Coils • Direct Expansion Water Coolers • Heat Exchangers • Disseminator Pans.

WATCHDOG OF THE NATION'S FOOD SUPPLY
LARKIN COILS INC.
519 MEMORIAL DR., S.E. • ATLANTA, GA.

Commercial Refrigeration

Imitation Ice Cream Undersells Real McCoy; California Statute Hampers Merchandising

LOS ANGELES—A license to produce "Mellorine"—which is to ice cream what oleomargarine is to butter—has been granted to Frozen Desserts, Inc., a Los Angeles firm recently established for the manufacture of this product.

However, because of some of the restrictions placed on the manufacture and sale of the "imitation ice cream product," which is made from vegetable oils, there seems to be some uncertainty as to how it will be marketed.

The problem in distribution arises from Section 580 of the State Agricultural Code which states: "Imitation ice cream or imitation ice milk shall not be manufactured, processed, frozen, handled, distributed or sold in any place where ice cream or ice milk is manufactured, processed, frozen, handled, distributed, or sold."

DEBATE HINGES ON MEANING OF WORD "PLACE"

There has been some debate on just what is meant by the term "place where ice cream is handled or sold." One distributor planned to put special low temperature cabinets in food markets, which would be separate from ice cream cabinets.

It is understood that the California State Agriculture Department ruled out such a procedure being in compliance with the law, stating that the regulation forbids sale of imitation ice cream in the same market as the real product. Some stores are said to have filed with the Agriculture Department for a writ of mandate requiring the department to give them a license to sell the product in the same store with real ice cream.

Some supermarket chains were said to be "considering" the possibility of climinating the merchandising of ice cream and substituting "Mellorine" in its place.

PRICE IS BIG APPEAL

Big appeal of "Mellorine" is its price. Reports say that it will be sold for 15 cents a pint, with the possibility of the price going as low as two pints for 25 cents.

The license to manufacture and the license to sell imitation ice cream is granted under California's Agricultural Code as amended through 1951. Section 666 thereof provides "It is unlawful . . . to engage in the business of or occupation of manufacturing, selling, dealing in . . . imitation ice cream or imitation ice milk . . . without having first applied for and obtained a license to do so."

Section 667 state "All licenses issued under Section 666 expire on June 30 each year . . . . The fees for issuing said licenses are for each establishment annually.

"(a) Manufacturers or processors within the State $100.

"(b) Wholesale dealers in or importers or agents of importers $50.

"(c) Retail dealers $5.

"(d) The keeper of any hotel, restaurant, boarding house, or other place where meals are served and payment is received therefor $2."

As the cards lie on the table after the first deal the dairy and butterfat interests may seem to have the best hands but after the draw things could change. The rumors to the effect that some large supermarket chains, to comply with present regulations, might decide not to turn down the sale of "Mellorine" but rather to cease handling ice cream, could change the minds of some of those in the State Assembly who are now studying sections 580, 666 and 667 of the Agricultural Code. The State Agricultural Department just can't find a comfortable position anywhere. Providence placed both cows and cottonseeds among the agricultural products and California is now growing lots of both. When ones offspring brawl, the parents can do little but wring their hands.

Home Freezers May Force Stores To Stock Full Line of Frozen Meat Cuts

CHICAGO—Problems and developments in self-service meat merchandising and what the rapid rise of home freezers may mean to supermarkets were analyzed by packing house and chain store representatives at a joint packing house and retail conference held here recently.

The conference was sponsored by the Amalgamated Meat Cutters and Butcher Workmen of North America, AFL. Some of the points brought out by speakers were these:

Louis Stein, assistant president, Food Fair Stores, Inc., Philadelphia: Because the number of home freezer owners is increasing so rapidly, stores eventually may have to carry a full line of frozen retail meat cuts packaged for freezer storage. When this comes about, management must have free rein to work out the most economical method for supplying these customers through supermarket channels for its very survival.

SELF-SERVE MEAT DEPARTMENTS RISE TO 7,000

Sam Teitelman, manager, marketing research department, Armour & Co., Chicago: The number of self-service retail meat operations in the U. S. has risen from about 5,000 a year ago to around 7,000 at present. The majority of these are big-volume stores.

Teitelman also said he doubted that packers will ever undertake the packaging of retail meat cuts or that such a move is even feasible. Pointing out that the average branch house of Armour & Co. now stocks about 750 different items, he asked: "What would happen if we were to add, say, 500 retail meat items which had to be carried in freezers?"

Teitelman said the biggest problem of most stores in merchandising self-service meats is production. Special orders, he stressed, upset production schedules, take valuable time from busy personnel, and defeat the main purpose of the self-service method.

PERSONAL CONTACT LOST

Discussing another problem, that of packaging, he noted that loss of personal contact puts a big burden on the package and that the most attractive packages are the first to go.

Other problems cited by Teitelman were display, determining consumer preferences, and scaling and pricing. Regarding the latter, he pointed out that the exact weight and price must be stated on the label and is subject to checking at any time by both consumers and weights and measures inspectors.

Another point made by Stein was that self-service results in more jobs for more people. He said that as self-service meat departments grow in size and volume, more skilled workers are required. Self-service meat, he added, is one of the few important services yet to be offered to many customers.

Joseph Hall, president of Kroger Co., told the conference it is important to both operators and butchers that meat departments achieve top efficiency and volume because of competition between products in a supermarket and between market operators.

Hall also revealed it will cost his company about $100,000 to convert its Chicago stores to self-service.

Another Kroger official, Walter Fitzgibbons, head of meat merchandising for the company, reported that Kroger's profit per 100 lbs. of meat last year averaged 31 cents, before taxes. He noted, too, that under the company's meat cutting method, bone and fat waste in a 600-lb. steer carcass totals 20.4%.

Henry Schumacher, manager of merchandising service for Swift & Co., called attention to the trend to suburban living and to more evening shopping. The former, he said, is resulting in the growth of suburban shopping centers and larger food stores. The medium-size food store is on its way out, being replaced by small and large stores, he declared.

Bush Board of Directors Declares Two Dividends

WEST HARTFORD, Conn. — The board of directors of Bush Mfg. Co. have declared a dividend of 28⅛ cents per share on the 4½% cumulative convertible prior preferred stock payable July 1 to stockholders of record on June 17.

They also declared a dividend of 31¼ cents per share on the 5% noncumulative preferred stock.

Nash-Kelvinator Dividend

DETROIT — Directors of Nash-Kelvinator Corp. recently declared a quarterly dividend of 50 cents per share on outstanding capital stock, payable June 26 to stockholders of record June 2.

DEAN
"Job Tailored"
COLD PLATES

Save time . . . save money! Any size, any shape, most metals! More and more the choice of cost-conscious refrigeration engineers. Get the full details today!

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DEAN PRODUCTS, INC. STerling 9-5400
1042 DEAN ST. • BROOKLYN 16, N. Y.

true
MODERN COOLERS FOR A MODERN AGE

True Stainless Steel Coolers are of modern streamlined design—beautiful in appearance with the finest refrigeration money can buy. True also manufactures a complete line of baked enameled coolers, both self-contained and remote.

True Features . . .
(1) Streamlined cabinet design to withstand high humidity and salt air*,
(2) Fingertip touch roll-back doors,
(3) Self-contained models that eliminate expensive installation costs,
(4) Maximum bottle capacity for floor space used.

*True sales in Puerto Rico have doubled during the past year because of this important feature. Today they are one of the most sold coolers on the Island.

Model TS-621 Self-Contained, ready to plug-in, 21 case dry cooler with 12 ice cube trays and water stand—Available in sizes up to 10' long.

Write or Call Today for Complete Details.

TRUE MANUFACTURING COMPANY
LUcas 6700 2905 PINE STREET • ST. LOUIS, MISSOURI

These Refrigeration Driers were designed to bring

Economy in Purchase and more Efficiency in Operation

Both of these designs are Wolverine's newest developments and present many advantages.

The illustration on the left is an accumulator drier with the silica gel in a monel mesh bag held in position by a stainless steel spring clip at each end. These clips have a two-fold purpose: (1) in transit and in normal handling they prevent the bag from shifting, and (2) they act as baffles which disburse the gas or liquid around the bag, thus avoiding direct impingement. The baffling is such that no excessive increase in pressure drop is experienced.

Made in standard sizes—1", 1¼", 1½" O.D. with silica gel capacities 15, 20, and 30 grams

The drawing at the right illustrates a low side drier used on the capillary tube end of an evaporator unit. The new baffle screen fits the inside diameter of the tube and is held in place between inside beading and tapered end, a fool-proof assembly. This baffle serves to prevent impingement on silica gel, thus preventing possible pulverization.

Made in standard sizes—¾", 1", 1½" O.D. with silica capacities 7, 14, 21 grams

These are typical examples of our Spun End Process† showing two of the many shapes that can be produced, and the economies that can be affected. The designs, you note, obviate use of brazed enclosures, thus reducing costs of these extra parts and the resulting assemblies.

Other practical forms will suggest themselves. We'll be glad to tell you more in our brochure, *Spun End Tube*, if you ask for it on your stationery.

†"A PATENTED PROCESS RE.22465"

Other Wolverine Products
CAPILATOR* —the capillary tube for restriction purposes
COMMERCIAL TUBE
AUTOMOTIVE TUBE
CONDENSER TUBE
COPPER WATER TUBE (K-L-M)
ELECTRIC WELDED STEEL TUBE
FABRICATED TUBULAR PARTS
WOLVERINE TRUFIN* —the integral finned tube
REFRIGERATION AND AIR CONDITIONING TUBE (Plain or Tin Plated)
S.P.S. PIPE
SPUN-END TUBE†

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†A Patented Process RE 22465

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ESTABLISHED 1916
Plants in Detroit, Mich. & Decatur, Ala. Sales offices in Principal Cities

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Portable Ice Rink

30,000 Ft. of Plastic Pipe, a 'Freon' System Mounted on a Semi-Trailer Convert Tennis Court to Ice Rink In Matter of Hours — Costs $50,000

By C. Dale Mericle

DETROIT — Several mechanically refrigerated outdoor skating rinks may be available for Detroit residents next winter.

One has already been installed, and it successfully passed as grueling a test as might be devised—maintaining ice despite air temperatures in the high seventies and the direct rays of a brilliant sun, which were "clocked" at 106° F.

Honesty compels us to report that at 10:30 a.m. the rink surface was wet, as some skaters who slipped will testify. But at 7:30 a.m. it was frozen too hard for skating and authorities feared it might crack. The skaters who slipped didn't mind particularly because a few minutes later they removed their skates and jumped into the adjoining swimming pool anyway. (Yes, May 20 was that warm.)

Easily Stored

This rink is unique in many respects. It's probably the first anywhere to employ plastic piping. It's laid out on an asphalt tennis court, and normally after a winter's operation the light-weight piping will be taken up and stored. The erstwhile rink then becomes a tennis court again.

The refrigeration system itself is mounted on a large flat bed semi-trailer, which can be readily hauled into storage during the summer. The trailer offers other advantages, too.

Cost of the entire setup is approximately $50,000, which is less than a tenth of $750,000 estimated for a similar rink built along conventional lines.

Idea of this unusual rink was conceived by C. A. Meadows, Toronto architect who has engineered many skating rinks in Canada. He gave his plans to the city of Detroit without charge.

Although the original layout called for an ammonia system, Beltz Engineering Laboratories, the successful bidder, employed a Beltemp Model 66 "Freon-22" brine chilling system built under the direction of John Patzer. Charles R. Beltz, head of the firm and, incidentally, a former speed skater, was also the builder of the Detroit Skating Club's indoor rink a few years ago.

(This installation was described in the March 6, 1950 issue of AIR CONDITIONING & REFRIGERATION NEWS.)

The new "portable" rink is located in Chandler Park, one of the many facilities maintained by the city's Department of Parks and Recreation. It is laid out to provide a skating surface 70 ft. wide by 140 ft. long.

Because of the excessive heat and rain which plagued the test model, only half of the total area was frozen —35 by 140 ft.

Excessive rain, by the way, played a dirty trick soon after the first test run began. A nice surface of ice had been obtained, and then more rain threatened. Park officials promptly covered the rink with tarpaulins. It did rain for a few hours, but soon after it stopped, they discovered the rain had frozen above the tarps.

The crew worked from midnight to 3 a.m. trying to pull off the tarps, which had also become frozen to the ice below. They got them off finally, but the city is now minus 14 good tarpaulins. Has plenty of rags, though.

1½-In. Plastic Pipe Laid

Some 30,000 ft. of 1½ in. polyethylene plastic pipe, furnished by Michigan Plastic Pipe Co., was laid on the asphalt tennis court. A course of sand was employed between the asphalt and the pipe, but only enough to ensure a level surface. The flexible pipe is held on approximately 4-in. centers by metal spacer clips.

Single loops of the piping (each approximately 180 ft. in length) tie into a header at one end of the rink. Header itself is made of 6 in. iron pipe and incorporates a by-pass valve so that only one-half of the rink may be frozen at a time, if desired.

Header is insulated and is further protected by a wooden housing extending the full width of the rink. This makes a convenient bench for weary skaters.

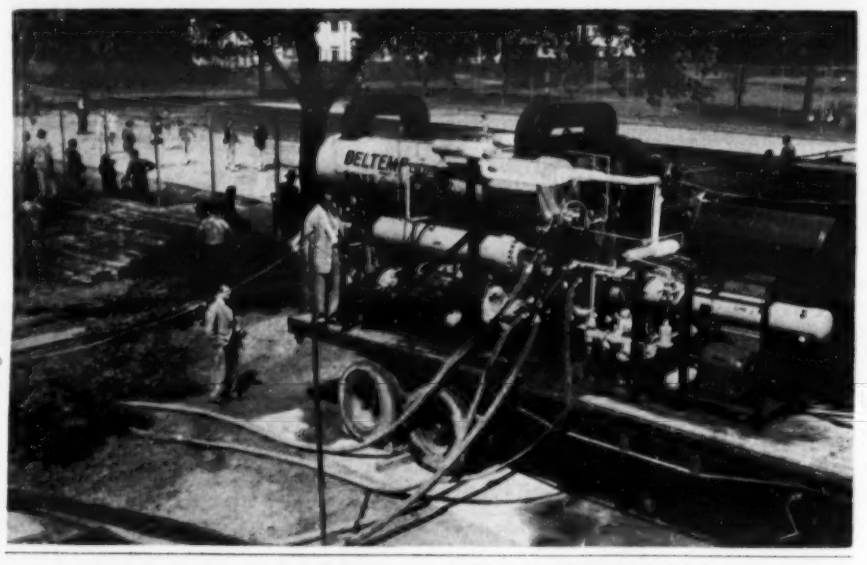
Flexible 6-in. hose connects the header to the brine chilling equipment on a semi-trailer provided by Fruehauf Trailer Co.

Compactly mounted on the trailer are three Airtemp radial 5-cylinder "Freon-22" compressors, an Acme brine chiller, and the necessary pumps, controls, and electrical panel. In this application each compressor is rated at 22 tons. Compressor design permits unloading of individual cylinders so the high-side capacity can be varied from a minimum of about 4 tons up to 66 tons.

(Concluded on next page)

ABOVE: BRINE circulates through plastic pipe, which is light enough to be rolled up and stored. City of Detroit plans to operate rink (there may be six more by next winter) from mid-November through March.

BELOW: 66-TON capacity Beltemp brine chilling equipment on semi-trailer maintains ice for outdoor skating rink (upper left) laid out on tennis court of a Detroit public park.



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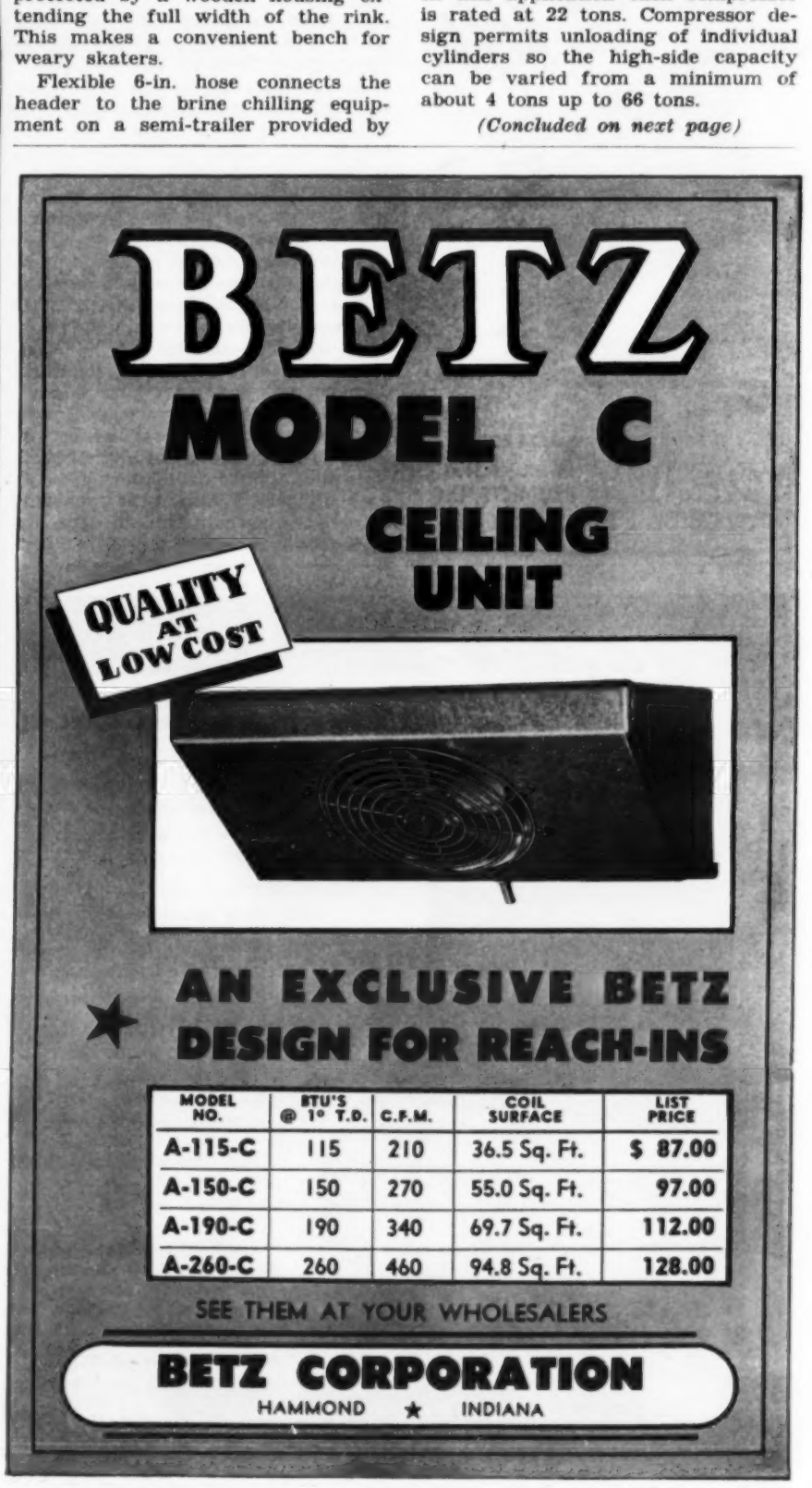
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BETZ CORPORATION
HAMMOND ★ INDIANA

Portable Ice Rink--

(Concluded from preceding page)

This equipment cools calcium chloride brine which circulates through the header and plastic pipes of the rink. Designed to operate at a maximum outdoor temperature of 50° F., the system provides 15° F. brine off the chiller. Returning brine is 17° F.

Nearby Bathhouse Provides Water, Power

Electric power for the system was run over to the trailer from the bathhouse serving the swimming pool which also had facilities to furnish condensing water through fire hose to the trailer-mounted equipment.

On the demonstration day when the rink was formally displayed for city officials, discharge water from the condensers was piped into the swimming pool.

The "big day" was complete—a congratulatory message delivered in person by His Honor, the Mayor (Albert E. Cobo), a bunting-draped stand filled with other city officials including the fire chief, a brass band (on records), and fancy skaters (nice figures, too), some of whom doubled in brass later by staging a water ballet in the pool.

The place was also overrun by press photographers and TV newsreel cameramen.

Although the business of skating and swimming on the same day just a few feet apart was obviously a publicity gag—and a very effective one at that—the idea of setting up the rink next to the bathhouse is strictly practical.

"The bathhouse has the facilities to supply both water and power for the refrigeration system," explains William Bachman, parks development coordinator for the city and the official who's been "living with" the skating rink from its beginning.

"In addition, the locker rooms are heated, so these will make excellent places for skaters to put on their skates and check their shoes.

"Another thing we like about the skating rink," he added, "is that we'll get greater use out of our park facilities. The bathhouse, for example, is used now only two months more or less every year. If we can operate the skating rinks from mid-November until the end of March every winter, the Detroit taxpayers will get that much more good out of their buildings."

As for the refrigeration equipment being installed on a trailer, Bachman comments, "For one thing, you can buy a trailer cheaper than you can put up a permanent building today.

Special Events Possibilities

"With the trailer and the lightweight plastic pipe we could actually have a 'portable' rink. For special events we could move in almost anywhere, on a football field for example, and create an ice rink if desired."

Also being considered is using the trailer setup as a booster for the initial freezing of other rinks that might be built with equipment of less capacity, points out Beltz. Once the ice was frozen with the aid of the booster trailer, the smaller permanent refrigerating equipment could keep it frozen, he believes.

The trailer idea obviously is also a boon to the refrigeration contractor, who can make the installation at his own shop instead of on the job, it was pointed out.

LeDuc, Jones, Gustafson Appointed to Field Sales Posts by Coolerator

DULUTH, Minn.—Three new appointments to the Coolerator field sales organization were announced recently by F. C. Margolf, sales manager.

Roger LeDuc

D. B. Jones

R. O. Gustafson

Roger D. LeDuc has been appointed district manager for the West Coast region to succeed Herschel L. Johnson who resigned to join the firm of Schafer-Wright, Inc., Coolerator distributors in Portland, Ore.

In a reorganization of eastern sales territories, D. B. Jones has been appointed district manager for the newly-created sales territory of upper New York and eastern Canada. R. O. Gustafson was named district sales manager for the Dallas, Texas, territory.

LeDuc has been associated with Coolerator Co. for the past seven years in various capacities in the sales and service department. He was formerly national service engineer.

Jones came to Coolerator from Murray Corp. of America where he was eastern regional sales manager for the past three years. His prior appliance experience includes association with Evans Products Co., Westinghouse Electric Supply in Syracuse and Rochester, and B. H. Spinner Co., appliance distributor in Syracuse.

Prior to his appointment, Gustafson served as manager of field financing for Coolerator. His former business associations include General Electric Credit Corp., Chicago; Household Finance Corp., Chicago; and City National Bank, Rockford, Ill.

Gustafson's sales territory will include Little Rock, Ark.; Oklahoma City; and San Antonio and Houston, Texas.

Chicago RACCA Sets Date For Golf Tournament, Dinner on June 11

CHICAGO—The sixth annual golf tournament and dinner of the Refrigeration & Air Conditioning Contractors Association of Chicago will take place on Thursday, June 11, at the Itasca Country Club, according to Frank L. Haas, chairman of the committee on arrangements.

Two hundred men attended last year's outing and each went home with at least two gifts. This year's event is being planned on an even larger scale, with greater attendance, and thousands of dollars in prizes to be awarded, Haas said.

Tickets can be secured from the association's headquarters located at 228 North LaSalle St., Chicago 1.

G-E To Completely Equip Model Homes In 11 Cities

NEW YORK CITY — To demonstrate the ease and practicability of integrating modern electrical equipment into the home, the General Electric Co. is sponsoring a series of completely equipped model houses throughout the country this year.

The first of 11 houses was opened in Pittsburgh May 17.

All the houses incorporate complete electric kitchens and laundries, year-round air conditioning and electric water heaters, light conditioning, remote control wiring and circuit breakers, and make provision for the use of television and radio receivers and small appliances. G-E's Textolite plastic surfacing material is also used in the houses.

The houses are being designed by leading architects specifically for the areas in which they are being constructed by local builders. Decoration and furnishing are in charge of national magazines and local stores.

Major emphasis is being placed on the development of houses that are functional not only in plan but also in operation. "We are trying to integrate plan, operating equipment, decoration and landscaping to produce the ultimate in convenient and comfortable living," according to Stanley C. Schuler, project supervisor.

The houses range from 1,100 to 1,800 square feet and are designed to sell complete with lot and equipment, for as low as $17,000.

Houses are being built in Boston, Dallas, Kansas City, Louisville, New Orleans, New York, Philadelphia, Pittsburgh, Phoenix, Raleigh and San Francisco.

Detroit Refrigeration Code O. K. As Is for Year-Round Residential Air Conditioning

DETROIT—A willingness to work within the framework of Detroit's present refrigeration licensing code, which covers the installation and service of residential year-round air conditioning units, was expressed recently by representatives of local plumbing and heating groups.

Called to a meeting with local refrigeration and air conditioning contractor representatives by Frank Drogosch, Detroit's chief safety engineer, they raised no objections to the provisions of the ordinance when it was explained to them.

The code requires a firm installing or servicing refrigeration equipment in excess of 1 hp. or a system containing more than 10 lbs. of refrigerant to have a refrigeration contractor's license. Thus it would apply to the installation and service of almost all residential air conditioners that are tied in with heating systems.

Under the law, the owner of the firm or one supervisory employe is all that needs to qualify for a license. As long as one supervisor can qualify, any number of journeymen can make the actual installations.

It was explained that a heating or plumbing firm that sold residential air conditioning units need not have a license if it sub-contracted the installation and service of the units to a licensed contractor. In such case, however, a ruling by the city's corporation counsel requires that the contract to the customer state who the licensed contractor is that is responsible for the installation.

Jay Biddle, representing the Detroit Warm Air Heating Association, suggested that heating contractors be permitted to take out a limited refrigeration license that would apply only to residential air conditioning units.

He was satisfied, however, when it was pointed out that there were already set up three classes of licenses. A class B license which permits the contractor to work on units up to 7½ hp. only would be sufficient to cover the installation of most residential air conditioning units.

Other heating representatives made it clear that they were not interested in getting into the refrigeration business. They pointed out that nearly all heating equipment manufacturers are now turning out air conditioning units to go with their heating units.

These were packaged units and usually required only plumbing and electrical connections and to be hooked up to the ductwork. All they wanted was to be able to make these installations. They were perfectly willing to farm out the service work to a refrigeration firm.

Heating and plumbing representatives expressed the opinion that they could see no conflict between their interests and those of the refrigeration men under the present code.

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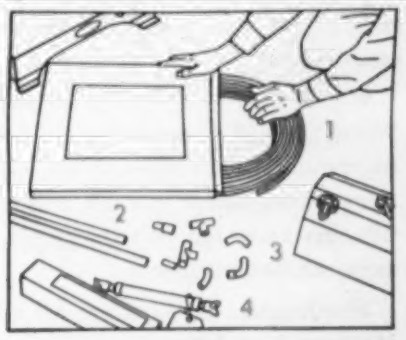

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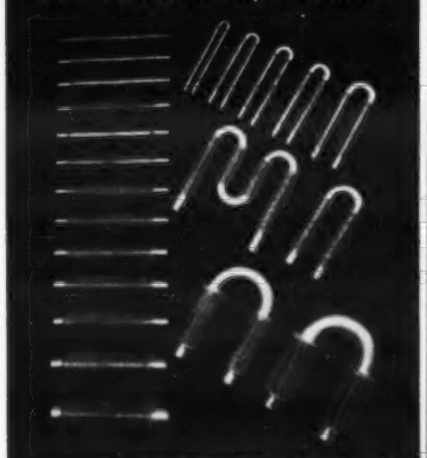

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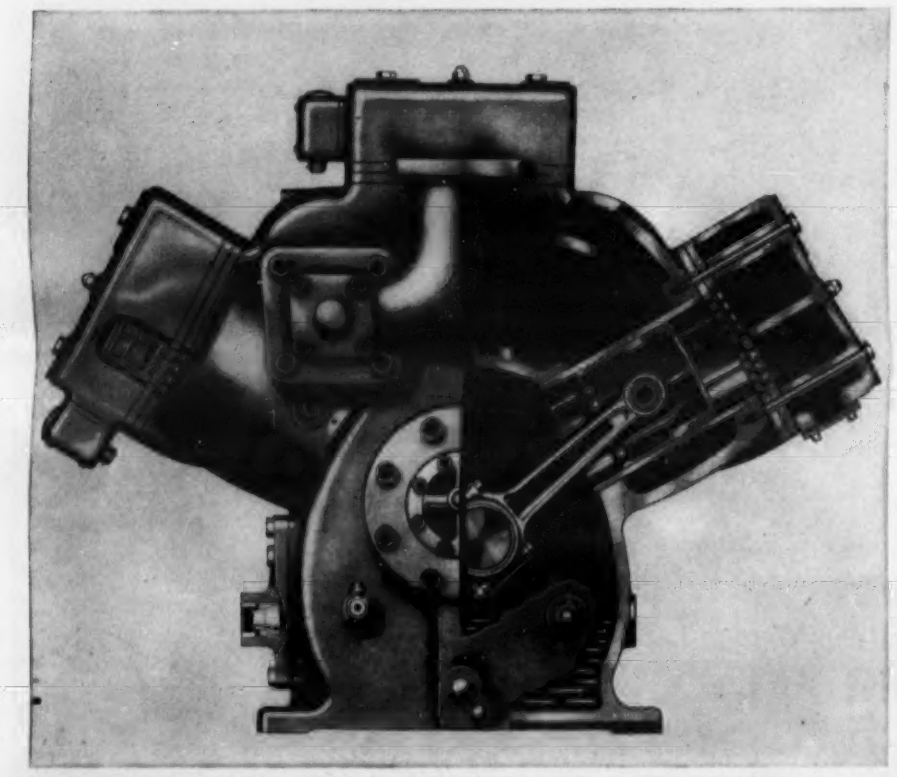

ELECTRIC UNLOADING, improved internal manifolding, and a new force-feed lubricating system are three of the many advances in functional design incorporated in the new Worthington "J" Freon compressor.

HANDSOME, EFFICIENT Worthington Packaged Air Conditioners are available in sizes from 3 to 15 hp for installation in homes, offices, restaurants and stores. (Package units for remote installation are available in 15, 20, and 25 hp sizes.)

BIG news of the industry...
Worthington's new "J" compressor!

This is Worthington's answer to the demand for a Freon compressor that combines all the advantages of low- and high-speed operation. It's the new, *optimum-speed* "J" compressor—a compact, high-capacity machine with the same high-operating efficiency and long service life as its lower speed predecessors.

Worthington's engineering advances and new products such as this make Worthington the most complete line in the field. From giant industrial refrigeration systems down to the air-conditioner for a baby's nursery, Worthington can handle any job, and provide exactly the right equipment. Distributors know that Worthington's complete unit responsibility pays off in more satisfied customers.

Worthington Corporation, Air Conditioning and Refrigeration Division, Harrison, New Jersey. A.3.53

ANOTHER ADDITION to the Worthington line is this beautiful window air conditioner available in ¾ and 1 hp sizes, with features that put it years ahead of any other window unit. Louvers can be quickly adjusted to send air current where it does the most good. And when desired, the conditioner cycle can be reversed, to exhaust stale air.

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"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—*Charles A. Dana.*

Why Deficit Spending Should End Before Taxes Are Reduced

MANY CITIZENS want to put pressure on the Federal Government to reduce taxes.

However, if taxes are cut before the national budget is balanced, *there would be no real increase in our income.*

Deficit spending comprises phoney money "manufactured" by government. It pumps unearned income into the existing supply of credit—thereby diluting the purchasing power of all spenders, savers, and investors.

Inflationary money is "manufactured" by the Federal Government for commercial banks—through an involved process that we haven't the space to explore in this editorial.

Suffice it to say that the banking system winds up with a checking account which it can use to hand out credit or to pay future bills in advance; along with piled-up interest-bearing I.O.U. certificates which dilute assets by expanding them.

When government-controlled banks borrow to lend, no extra *goods and services* are added to the nation's supply. As a result, an *enlarged money supply* competes for an unenlarged supply of things you and I want and will buy. Hence the prices of everything we buy and sell increase.

That is what has been happening to prices in the United States since 1940. High prices have been blamed on business, but they should have been blamed on *Government deficits.*

Let's suppose that your taxes have been lowered. You now have $100 more in cash than you had last year. Let's also suppose that the government had to add $100 to the money supply on account of having reduced your taxes.

Under normal circumstances this would mean that *your cost of living would go up* $100 and you would be able to buy no more than you could have bought *without the extra* $100. Also, your government would have contracted an interest-bearing debt that must be both serviced and paid back out of *your future taxes.*

Your tax reduction wasn't honest. You paid the tax anyway and—to make matters worse you (as the taxpayer) now owe $100 more than you did before. And you have to pay the interest to boot!

Only way to *reduce taxes* is to *cut Government spending.*

That may hurt, at first. In the long run, though, every citizen will benefit.

An unbalanced budget is the chief cause of inflation.

Quotable Quotes

"Civilizations, historically, fail when government consumes more than ¼ of the production of the people. Today government in the U. S. is taking ⅓ of the production of the people."—N. BRADFORD TRENHAM, General Manager, California Taxpayers' Association.

"There is a limit to almost everything except the number of palpably untrue things a fool will believe."—*Cincinnati Enquirer.*

"It is characteristic of Americans to think of politics in terms of the sports world. Thus, a presidential election is a 'race,' an unlooked-for result, an 'upset,' the opening of a campaign a 'kick-off,' and so on."—EDW. T. FOLLIARD, *Nation's Business.*

AT THE OPENING of Air Filter Co., New Orleans, Farr Co.'s filter-washer-oiler equipment was inspected by (l. to r.): John Marshall, president, Marshall, Neil & Pauley, Inc.; Charles Castiglione, general manager, Air Filter Co.; Victor Schiro, commissioner, City of New Orleans; J. D. McCampbell, sales manager, Farr Co.; Donald S. Harworth, southern division manager of Farr.

New Orleans Firm Joins Farr Filter Cleaning Service as National Program Expands

EL SEGUNDO, Calif.—Farr Co.'s program for making Farr certified service available in all major markets of the country moved another step nearer completion recently with the opening of Air Filter Co. of New Orleans.

The new firm is the 14th to be approved by Farr as a certified service agency. Tentative plans have been made for opening an additional 10 agencies this year and approximately 16 next year to complete the company's program for national coverage.

Said to be the only organization of its kind in that city, the New Orleans agency is a division of Marshall, Neil & Pauley, Inc. Charles Castiglione is the general manager.

Among those present at the opening of Air Filter Co. were City Commissioner Victor Schiro; J. D. McCampbell, sales manager of Farr Co.; Donald S. Harworth, Farr's southern division manager; John Marshall, president of Marshall, Neil & Pauley; local mechanical engineers, heating, ventilating, and air conditioning contractors, and maintenance engineers; and representatives of Farr service agencies in other parts of the south.

Stating that it feels there is a need for a national cleaning service backed by a responsible manufacturer, Farr pointed out that cleaning of filters has always been a service problem for equipment manufacturers because a good percentage of service calls are found to be due to dirty filters rather than faulty equipment or engineering.

General cleaning method used by Farr service agencies was described as follows:

A continuous conveyor feeds filters into a pre-wash bath, then into a 170° alkaline solution where an axial flow pump backwashes through the filter at the rate of 3,500 g.p.m. After a final rinse with clear water, the filter comes out "clean as new."

The filter is next conveyed to a drain rack where it is dried off before entering a special Farr adhesive oil bath said to assure maximum filtering efficiency. Then, a spinner, moving at 287 r.p.m., removes excess oil and properly distributes the oil through the filtering media. Finally, the frame is hand-wiped.

Special storage racks keep filters clean and protect them from damage.

Five Contracts Awarded For Cooling Ballroom of Atlantic City Auditorium

ATLANTIC CITY—After approving an emergency appropriation of $230,000 to pay the cost, the City Commission awarded five contracts to provide air conditioning for the ballroom of the municipal auditorium.

Total amount of the contracts is $207,547, but there will be the additional expense of engineer's fees. Bernard Strouse, who drew specifications and will supervise the work, will be paid six per cent of the cost.

The principal contract, that of furnishing the air conditioning equipment, will go to the Clermont Engineering Co., of Philadelphia, on a low bid of $124,740.

Other low bidders awarded contracts for the same project include M. B. Markland, general contract, $15,840; Lieber Rich & Son, plumbing, $6,405; Camden Iron Works, structural steel, $8,915; and Calvi Electric Co., electrical work, $51,647.

York Net, Booked Orders Rise In Six-Month Period

YORK, Pa.—York Corp. has reported that net profit in the six months ended March 31 totaled $670,344, equal to 52 cents a common share, compared with $644,523, or 49 cents a share, in the like year-ago period.

Orders booked for the six months amounted to $41,740,185, against $29,783,613 in the corresponding period of the preceding year. Uncompleted contracts totaled $33,941,073, compared with $24,112,285 a year ago.

Lanchester Firm To Handle Westinghouse Conditioners

HYDE PARK, Mass.—A franchise to handle Westinghouse self-contained air conditioning equipment has been awarded Vandersmith's Home Equipment Center at Lancaster, Pa., according to W. B. Cott, sales manager of the Westinghouse Air Conditioning Div.

Vandersmith's was founded in 1900 and now specializes in appliances, heating, plumbing, and modernization work. A sales force of five will handle the Westinghouse packaged air conditioners which are now being added.

Driy Elected Executive Vice Pres. of Emerson

ST. LOUIS—The board of directors of Emerson Electric Mfg. Co. has announced the election of John A. Driy to become executive vice president.

Earlier, it was announced that William S. Snead had been elected president and chairman of the board of Emerson Electric. The changes were occasioned by the recent death of Oscar C. Schmitt, former president and board chairman of the company.

Hager & Cove Named Airtemp Dealer In Lansing Area

LANSING, Mich.—Hager & Cove Lumber Co. recently was granted a Chrysler Airtemp franchise to merchandise Chrysler Airtemp air conditioners in the Lansing area, announced J. F. Knoff, vice president and general sales manager of Airtemp Div.

The 12-year-old firm principally has engaged in selling furnaces and heating installations in Lansing. With the addition of Airtemp air conditioning equipment, a new effort will be made to sell commercial, industrial, and public building heating and air conditioning installations to general contractors, said Harold Hager, president of the firm.

In addition to Airtemp products, Hager & Cove also handle Bryant and Perfection as well as Bard furnaces.

At the present time Hager and Cove employ 50 persons. Other officials of the firm are: Robert W. Schumaker, vice president, Norman B. Cove, treasurer, and Dale W. Post, secretary.

The heating department is managed by Ernest C. Fox. He is assisted by Jack B. Reib and Edwin McEnany, both of whom are heating engineers.

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"FREON 22"—"FREON 113"—"FREON 114"
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HENRY LINE VALVES really give you something extra
They give more dependable service because of advanced field-proven design and construction as well as patented features.

PACKLESS VALVES FOR FREON with Exclusive Balanced-Action

STANDARD TYPE
Ball check in balancing channel permits diaphragm inspection and replacement with valves under line pressure. Sizes, ¼" thru ⅝" flare; ¼" thru 1⅝" O.D. Solder, ¼" thru 1" F.P.T.

BLUE BANTAM TYPE
Same as standard Balanced-Action valve except that diaphragms cannot be inspected or replaced under line pressure. Size ¼" thru ⅝" flare and O.D. Solder.

PACKED VALVES FOR FREON Bronze-Wing Cap Type

Globe and angle types with solder connections, bolted bonnets, sizes ⅞" thru 5⅛" O.D.

SEMI-STEEL WING CAP TYPE
With bolted bonnets and square companion flanges. Furnished with brass tailpieces (O.D. Solder) 1⅜" thru 6⅛" or with steel tailpieces for welding to pipe, sizes 1¼" thru 6".

Also Globe and angle types with F.P.T. connections, sizes ½" thru 2".

PACKED VALVES FOR AMMONIA Permanent-Mold Iron and Semi-Steel

Compact and strong with self-aligning stem disc. Sizes (F.P.T.), screw bonnet: ¼" thru 1", bolted bonnet 1¼" thru 2"—with flange connections 1¼" thru 5".

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What Was New

At the Supermarket Show

TYPHOON'S PROP-R-TEMP heat pump was shown for supermarket operators with the suggestion, as pointed out by Gloria Heinz, that they "use the heat from your freezing equipment to heat your store." KEY NO. C-624.

ABOVE: DESIGNED SPECIFICALLY for the supermarket, American Gas Machine's new SF1D "Super-Flaker" feeds ice into stainless steel bin which has storage capacity of 600 lbs. of flake ice to meet weekend rush. Rita Gnewotta checks bin while Diane Hendrickson points to chute feeding ice to bin. KEY NO. C-625.

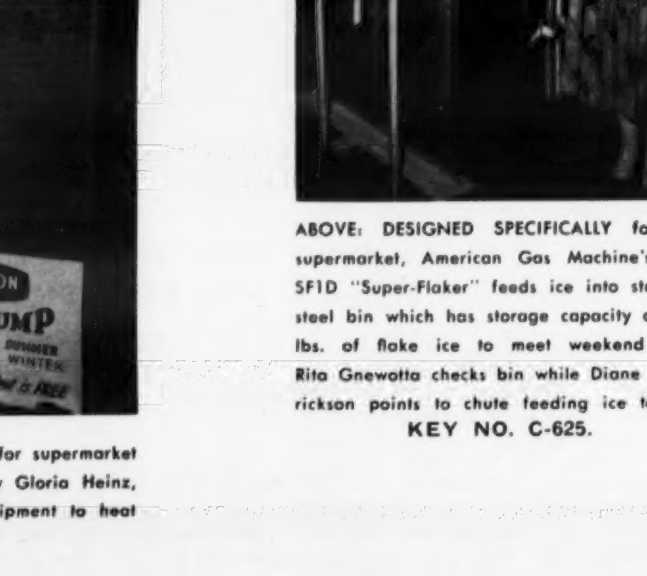
ABOVE: FRIEDRICH cases like this model OY-11R frozen food fixture have been redesigned to line up with produce case behind Marilynne Todd and other fixtures in the company's line. KEY NO. C-626.

REFRIGERATED PACKAGING table shown by Hussmann provides 35° temperature for meat while it's being packaged. This permits wrappers to work in comfortable air conditioned room but meat is kept cold and firm. Designated as model PT-8, the 8-ft. case is designed for continuous installation. KEY NO. C-627.

DISPLAY TABLE refrigerated by self-contained ½-hp. hermetic unit has been completely redesigned by Sherer-Gillett to provide forced air delivery from rear of case. Other features are explained by J. F. Miller for Lucille Schroeder. KEY NO. C-628.

GM STEEL Tubing

Answers Your Refrigeration Problems!



BECAUSE IT MEETS the demand for *high quality, manufacturing efficiency,* and *low cost,* GM small diameter Welded Steel Tubing is the choice of more and more manufacturers of refrigeration units.

GM Steel Tubing is ideal for evaporators, condensers, and connector lines. It is clean, ductile, uniform and unaffected by brazing or silver soldering operations. It lends itself readily to all types of processing—bending, end sizing, swaging, beading, drawing, flattening, piercing, upsetting, shearing, perforating. Choice of plain, copper plate, or exclusive GM copper Fuse-Kote finish.

Mass-produced by Rochester Products at a rate of *hundreds of thousands of feet daily,* GM Steel Tubing comes in coils, straight lengths, or formed to your specifications. Why not find out how it can help *you* to build *better products, faster,* for *less money!*

CONNECTOR LINES • Because it is readily formed into the most intricate shapes, GM Steel Tubing is perfect for all types of connector lines.

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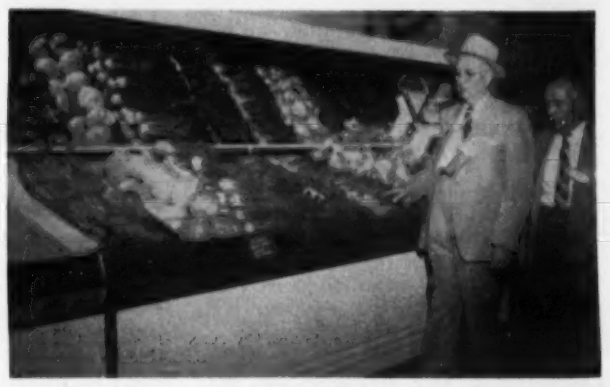
Commercial Refrigeration

ELECTRIC DEFROST is one of several features of the Weber "Zero-Master" open case for frozen foods, Jack Whitted explains to Dianne Dean. Of endless design, this 10-ft. case is said to hold 1,400 packages of frozen foods. KEY NO. C-629.

FROZEN BAKED goods can be merchandised from this new open case introduced by Federal Refrigerator, learns Mrs. Ralph Aschinger. Dinoc finish simulates wood grain to make case harmonize with conventional bakery fixtures. Case is available in 7 and 11-ft. lengths. KEY NO. C-6212.

ICE CREAM can be kept at -10° to -15° in this new open Tyler case, said to be the first self-contained fixture designed for endless construction. Donna Kime also noted that warm air off condenser is forced up to sweep front glass. KEY NO. C-6213.

McCRAY'S NEW self-contained frozen food case features large display area and high level of display, Gloria Heinz finds. Designed for continuous installation, the case is available in two lengths, 7 ft. or 9 ft. KEY NO. C-6210.



COLOR PANEL on front imparts a new note in the C. V. Hill case line, as C. S. Hughes observes with C. L. Ames on the model 575 produce fixture. The 3½-in. wide panel is available in gray, green, gold, or white on hammered aluminum rolled in four different designs. KEY NO. C-6214.

EVANS OPEN dairy display case originally designed as 6-ft. fixture now is also available in 8-ft. lengths, J. Evantoff explains to Joyce Lee. Glass ends can be removed for continuous installation. KEY NO. C-6211.

For further information on these products use key numbers and Information Center Form which appears on page 24.

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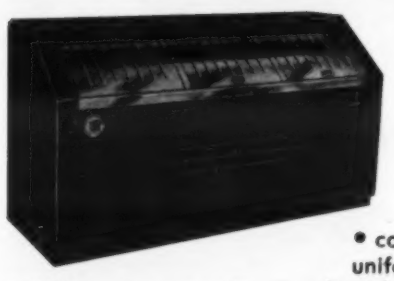

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Now you can stop this unnecessary and costly damage with the PENN Series 275 Oil Protection Control with the built-in Time Delay Switch.

Here's how it works! When compressor starts, if the oil pressure does not build up to the proper point within a safe time period, the PENN 275 stops the compressor *automatically* before damage can occur. If oil pressure drops below a safe minimum during the running cycle . . . and does not rise to normal within the time delay period . . . the control stops compressor operation. Thus, the compressor never operates more than the predetermined safe time on subnormal oil pressure. Result? Positive, automatic protection at all times!

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Factors In Figuring Home Cooling Load

Because Most Heat Comes from Hard-To-Estimate Outside Sources Short Method of Calculating Is Not Accurate, Lee Miles Indicates

By Lee A. Miles, Sales Manager, L. J. Mueller Furnace Co.*

It would be impossible to cover all of the various factors involved in estimating the load on summer cooling equipment in this short time. Therefore, I am going to try and point out the factors involved in summer conditioning that have the greatest effect on equipment size, operating cost, etc.

Actually, domestic air conditioning has only begun to come into its own. Only within the last few years has the field of domestic air conditioning begun to gain in sales volume to an extent where it is becoming a factor in the refrigeration field. After the extremely warm summer we had in 1952, the sale of domestic air conditioning equipment has climbed tremendously.

I have been asked if it would be possible for me to give you an accurate short form method of figuring summer air conditioning loads so as to reduce the amount of time necessary in doing this estimating work. I am very sorry that I must state that there is no *accurate* short form method of figuring summer air conditioning loads in domestic work.

For a number of years the Air Conditioning and Refrigeration Machinery Manufacturers Association has had a short form method of figuring commercial air conditioning. Because the interior loads in commercial air conditioning are a considerably higher percentage of the total load and these loads can be accurately calculated, a short form method is possible.

In domestic air conditioning, however, the amount of heat transmitted through the walls and the effect from the sun on the walls are greater factors than the interior loads and as a result are difficult to narrow down into very narrow categories in order to work out a short form method. I must, of course, qualify this statement in the fact that several organizations are working on this particular problem and we hope that they will come up with accurate methods of calculating summer air conditioning loads which will reduce the amount of time involved.

Some companies, through their experience in the domestic air conditioning field, have worked out quick estimating methods for their own use which they apply in situations where a rough estimate is needed in order for the customer to make up his mind whether he wants air conditioning or not and the making up of the mind depends upon the size in price. The methods, however, have a large "E" factor (experience factor) and must be used with discretion.

Recently the National Warm Air Heating & Air Conditioning Association developed a short form method for figuring summer heat gains for homes and has gone to press on a manual on this subject. For the sake of reducing estimating time required in making the calculations necessary to arrive at the cooling load, some accuracy has been sacrificed.

The primary purpose of the method is to provide a dealer with a method whereby if he has a customer that wants to know what the equipment is going to cost him to air condition his home and he hasn't definitely decided to go through with the installation, it is possible to give him a quick estimate which is rough but accurate enough to give him a price, subject to revision if he is definitely interested and wants closer calculations made.

If the customer decides not to install summer air conditioning, after learning that he cannot buy it for a couple of hundred dollars at the present time, the dealer has not wasted too much of his time on the cooling load estimate.

Turn All Available Data Over to Manufacturer

If the customer is definitely interested in installing summer air conditioning, then I would suggest that you turn the building plans of the home, or a sketch of the home, if the warm air system is already installed and the summer cooling equipment is to be added to an existing system, along with complete construction information over to the manufacturer of the line of cooling equipment that you handle.

Let him give you the equipment size, air quantities required, etc., if you do not have the experience in cooling estimating work. Most manufacturers have a service of this type for their customers.

However, in turning the job over to the supplier of your equipment, it is absolutely essential that you supply him with complete information about the installation and the building that is to be conditioned.

As in all estimating work, the first thing that is required is a plan or sketch of the building to be conditioned. This plan or sketch of the area must, of course, include the outside wall, window and door locations, the interior partitions, size of rooms, etc. You must know the construction of the building walls, the outside finish, whether it is a drop siding or whether of brick or stone construction, the color of this wall surface, the amount of insulation in the wall and the type of interior finish. This also applies to the roof or ceiling construction of the rooms.

Importance of Insulation

In order to give you an idea of the importance of insulation, let us consider two portions of a wall of standard brick veneer construction with a 1-in. air space, 1-in. wood sheathing, two by four studdings, and lath and plaster on the inside surface. In the first case, the wall does not have any insulation between the studdings and in the second case the wall is fully insulated.

In order to bring out the comparison of the value of insulation, we can go through the necessary calculations which will determine the amount of heat that will theoretically leak through the wall for every square foot of wall area for ever degree temperature difference across the wall. The uninsulated wall has a "K" factor of 0.27.

'K' Factor Defined

"K" factor is a term used to designate the amount of heat in B.t.u. per hour that will leak through one square foot of wall area for every degree temperature difference across the wall. The uninsulated wall, as I said before, has a "K" factor of 0.27 and the insulated wall has a "K" factor of .026.

For a matter of further comparison, assuming a 15° temperature difference across the wall, the uninsulated wall will transmit 4.05 B.t.u. per hour for every square foot of wall area and the insulated wall will transmit .93 B.t.u. per square foot of wall area. In other words, the uninsulated wall will allow 335% more heat to leak through than the insulated wall will.

From this you can see the effect insulation in the walls and ceiling of the room will have on the size of the equipment that will be needed to handle the particular area.

Color of Wall Is Important

Another factor you must consider is the color of the walls. Color has a very decided effect upon the load on the cooling equipment because the sun shining on the wall affects the temperature on the outside surface of the wall, which in turn affects the amount of heat transmitted through the wall. Naturally, the darker the wall color the more the sun will increase the surface temperature of the wall and in turn increase the temperature difference across the wall with the resulting effect of increasing the amount of heat transmitted in the conditioned area.

All summer air conditioning engineers would prefer that homes be built with aluminum or white colored walls in rooms so as to reduce the amount of solar heat to a bare minimum. This, of course, is contrary to the desires of our architects and designers.

Another factor that must be considered in the construction of a home is the effect of storm sash and storm doors. Through the south, storm sash is very seldom seen because of the lack of need during the winter heating season. Through the north, the use of storm sash is practically universal in order to hold fuel bills at a minimum.

Storm Sash Should Be Kept Up In Summer

The public has not reached the point yet where storm sash is accepted during the summer months but it is a very decided advantage in helping to reduce the load on the summer air conditioning equipment by reducing the amount of heat that is transmitted through the windows.

The fixture manufacturer, or walk-in or reach-in cooler manufacturer well realizes the advantage of storm sash. He uses double or triple glazing in doors and display cases in order to reduce the amount of heat that the glass transmits into the cooler.

To give you an idea of the effect of storm sash on heat transmission through windows, a window without storm sash or a plain single pane window has a "K" factor of 1.1 B.t.u. per hour per sq. ft. per degree of temperature difference. With storm sash, this "K" factor is reduced to .45 B.t.u. per hour per sq. ft. per degree temperature difference, or a reduction in transmission of 59%.

Therefore, even though your neighbors think you are crazy for leaving your storm sash on all year-round, or just plain lazy, it is definitely to your advantage to leave the storm sash on 12 months of the year when you have a year-round air conditioning system.

There are other factors that should be considered, such as the number of persons in a home, the direction the building faces, the amount of permanent shade which the building is subjected to, such as adjoining buildings, awnings over windows, roof overhangs, etc. Understand that we do not consider trees as a permanent shade because the wishes of the homeowner can change and along with this change would be a change in the location of the trees. Mother Nature can also decide that the trees are no longer useful and they must be removed. This she accomplishes

(Continued on next page)

*Presented before the fourth annual convention of the Michigan Association, Refrigeration Service Engineers Society.

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ON THE WETTED DECK SURFACE

New! 2 thru 15-Tons

HM RESIDENTIAL COOLING TOWERS

PRICED FOR THE HOME MARKET

Price-wise these Halstead & Mitchell Residential Cooling Towers throw open huge segments of the home and small building market to air-conditioning. Here is the development for which the industry has been waiting. Check prices today!

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Residential Cooling Towers recirculate precious water . . . meet requirements of municipalities which prohibit wasting cooling water to sewers. And low cost H&M units take residential air conditioning to the suburbs and rural area . . . recirculate from a cistern if need be!

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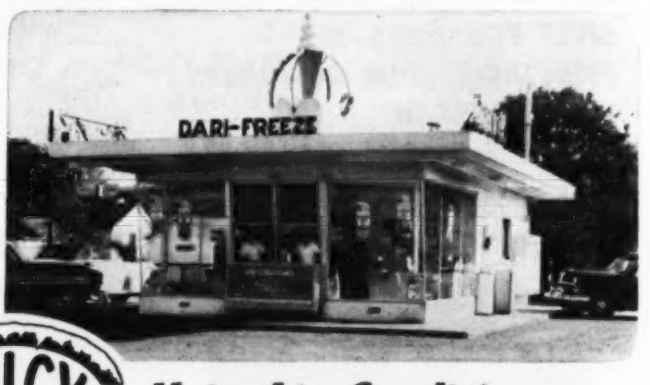

This Carvel soft ice cream station is one of two on Long Island, N. Y., cooled with Frick units. Installation by Hallam Engineering and Construction Corp., Frick Distributors at Brooklyn for 35 years.

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Figuring Residential Cooling Loads--

(Continued from preceding page)

very rapidly by means of high winds, lightning, or other types of tree removal service.

Location, Type of Equipment Affect Satisfaction

In the installation of your summer air conditioning equipment there are several things that affect the final satisfaction to the customer as far as the location and types of equipment that you should use in order to get the best distribution of air and the best living conditions in the conditioned area.

In all installations where air is handled and distributed, grilles or registers are needed in order to distribute the air properly over the conditioned area so that drafts and stagnation are not encountered. The location of the outlets is very important because cold air responds in a different way than warm air does upon being supplied into the conditioned area.

Low Grilles Not Recommended

We do not recommend that baseboard or low wall registers be used in summer air conditioning work. I know that some of you are going to say, "That guy is crazy because I have seen some of them work." Yes, gentlemen, you have seen some of them work but there are not enough of them working to be able to say that we recommend that you put summer air conditioning in a system using low wall or baseboard registers where the air is blown out of the register directly across the room.

The cold air naturally sinks to the floor upon emitting from the grille and if the grille location is close to the floor the cold air will stay on the floor and create drafts around the customer's ankles. Unless the register is of a type which deflects the cold air upward in such a manner as to avoid drafts on the occupants and still gives the satisfactory distribution of air over the room, it is best not to use the low wall type registers.

If Necessary Use Grilles Of Deflecting Type

Maybe this statement is confusing in the fact that I stated that you should not use low wall registers and then turned around and said that deflection types are satisfactory. My point is that you should be very careful in installing summer air conditioning equipment in a home which has a warm air heating system already installed and baseboard or low wall standard registers are used. If the customer insists that air conditioning be put into this installation, make sure that the registers or grilles are changed to a deflecting type. Don't come to an understanding with the customer that he is going to encounter drafts and they will be his headache.

Customer Will Not Admit His Error

Remember, the customer forgets statements and even though he agrees with you that the installation will be satisfactory, when company comes to call and they remark about the drafty conditions, he doesn't assume the blame for himself. He immediately places the blame on you because you installed the equipment.

Again some of you may point out that floor type registers are being used in summer air conditioning installations and are working very satisfactorily. Yes, I have seen several of these installations myself and know that they are doing a very fine job.

However, the heating profession is just the same as the medical profession in the respect that they cannot endorse any particular type of installation until enough of these installations are proving themselves to warrant a manufacturer or jobber or a dealer himself to go out and tell the general public that it can be done and then be expected to stand behind it 100%. We, therefore, recommend that you stay with high wall or center ceiling registers in order to insure that you will get proper distribution of air without uncomfortable drafts.

Noise Is Important In Residential Installation

As to the size of the registers or grilles that are needed to supply the air into the conditioned area, it is advisable to hold the velocity of the air through the grille down below 500 f.p.m. in order that you hold the noise level of the air to as low a level as possible. Remember that in residential work noise is a very important factor.

In commercial work such as a restaurant or clothing store, etc., noise is not as important because the background noise is at such a level that any air noise is not apt to be noticed. In domestic work, the background noise is very low, especially in the evening when everyone is quietly reading or watching TV, the noise of air emitting from a grille can become aggravating.

Another important item on grilles and ducts is the fact that they should never introduce air into a room at a temperature colder than 20° colder than the room. This means at a room temperature of 80° the entering air should never be below 60°.

The reason for this is that all registers or grilles have an inspirating action which draws room air from the side of the grilles over the face of the grille and into the air being discharged through the grille face into the room.

If the air coming into the room through the grille is at too cold a temperature, the grille will assume a temperature below the dewpoint of the air in the room and as the room air passes over the grille face, moisture will condense out of the room air onto the grille face and gather to such an extent that it can run off the grille down across the wall and cause streaks.

Naturally this is very objectionable on the part of the customer. In center ceiling grilles it is possible for condensation to form on the grilles and be blown off and fall in the room like rain.

I am thinking of one installation in particular that I encountered while having lunch in Washington, D. C., in the first part of September. My family and I were having lunch just to one side of a center ceiling grille and I noticed that an occasional drop of water would fall on the table or on one of us. My young daughter remarked that she didn't think that it could rain while we were inside of a building.

Grille Was Wet and Dripping

In looking around I noticed that the surface of the center ceiling grille was completely wet due to the fact that the cold air was inspirating room air and condensing out the moisture. This is objectionable because it not only is annoying but can cause damage to clothing and other articles.

Duct sizes will, of course, depend upon the amount of air that must be handled, the same as the grille size depends upon this factor and we

AIR CONDITIONING (Year-Round Residential)

recommend that duct sizes be such that air velocities in the main ducts are 1,000 f.p.m. or less and in branch ducts are 750 f.p.m. or less. This is also because of the low noise levels desired in residential cooling.

In connecting your summer air conditioning equipment into the ductwork of the heating system, we recommend that the equipment be placed in the warm air discharge side of the furnace. Here again I know that several of you gentlemen will say, "but we put it in the cold air return because it is much easier to install."

Yes, it is easier to install because of the fact that the cold air returns are generally brought back to the furnace in one or two large ducts which are easy to switch around and bring to one central location so as to introduce the air through the conditioning equipment at one point.

This procedure, gentlemen, is perfectly OK from an operation standpoint. It does not matter which piece of equipment the air goes through first in order to handle the cooling load that is desired. In other words the air could go through the cooling coils, then through the fan and through the heat exchanger of the furnace, through the distribution system into the conditioned area and do a satisfactory job.

From a length of life standpoint, however, placing the cooling equipment in a cold air return has a decided effect upon the life of the heating equipment. Unless the heat exchanger or rather the combustion chamber in the furnace is built of a material which will not rust, the passing of the cold air over the heat exchanger will promote rusting and will shorten the life of the heat exchanger. No furnaces built today have stainless steel heat exchangers.

Maybe you have installed some of these installations and they are working very satisfactorily so that you could justifiably make a point in question of this statement. Have you, however, examined the heat exchanger of the furnace after it has been in operation for five or six years and determined to what extent you have actually shortened the life of the heat exchanger in your customer's equipment?

This shortening of life does not show up for several years but if the customer becomes aware of the fact that, through the installation of the cooling equipment, you have shortened the life of the furnace itself, your reputation as a dealer or installer suffers.

Another installation practice which we recommend is the use of either

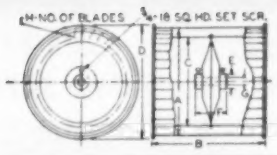
(Concluded on next page)

LAU

Center Disc, series "A"

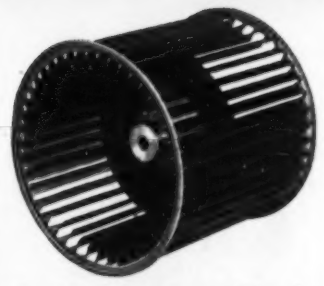
BLOWER WHEELS

double inlet spun wheels



Double Inlet Spun Wheels

Wheel Catalog No.	Part No.	A	B	C	D	E	F	G*	H
A9-6	7155	9½	6	7 11/16	9 15/16	1¼	2¾	¾	43
A9-3	6004	9½	7⅛	7 11/16	9 15/16	1¼	2¾	¾	43
A9-8	7156	9½	8	7 11/16	9 15/16	1¼	2¾	¾	43
A9	6003	9½	9½	7 11/16	9 15/16	1¼	2¾	¾	43
A9-10	7157	9½	10⅝	7 11/16	9 15/16	1¼	2¾	¾	43
A10-6	7158	10⅝	6	8⅞	11⅛	1¼	2¾	¾	48
A10-7	7159	10⅝	7⅛	8⅞	11⅛	1¼	2¾	¾	48
A10-3	6006	10⅝	8	8⅞	11⅛	1¼	2¾	¾	48
A10-9	7160	10⅝	9½	8⅞	11⅛	1¼	2¾	¾	48
A10	6005	10⅝	10⅝	8⅞	11⅛	1¼	2¾	¾	48
A12-3	6008	12⅝	9½	10 5/16	13 3/16	1¾	3	1	43
A12-11	7161	12⅝	11⅛	10 5/16	13 3/16	1¾	3	1	43
A12	6007	12⅝	12⅝	10 5/16	13 3/16	1¾	3	1	43
A12-15	7162	12⅝	15	10 5/16	13 3/16	1¾	3	1	43
A15-9	7163	15	9½	12⅝	15½	1¾	3	1	51
A15-3	6010	15	11⅛	12⅝	15½	1¾	3	1	51
A15-12	7164	15	12⅝	12⅝	15½	1¾	3	1	51
A15	6009	15	15	12⅝	15½	1¾	3	1	51



Double Inlet Spun Wheels

Superior design center disc construction—most efficient for maximum performance as to air volume and h.p. consumption. Baked enamel (standard)—also rustproof or hot-dip galvanized.

Write for Catalog Page 707-14

*Standard bore. Other bores can be furnished upon application.

The LAU Blower Company, 2202 Home Ave., Dayton 7, Ohio

World's largest manufacturer of furnace blowers

MUELLER BRASS CO. deluxe drier with the desiccant that is twice as effective!

Many extravagant claims are made regarding the moisture absorbing capacities of desiccants. The property that is most important to the refrigeration industry is not the total amount of water that a desiccant will absorb, but rather it's the end-point dryness of the refrigerant that really counts. End-point dryness is the amount of moisture left in the refrigerant after the drier has absorbed its capacity. Tests prove that Silica Gel has the capacity to absorb and hold twice as much moisture, by weight, as other commonly used refrigeration desiccants, while maintaining a fixed end-point dryness. Hundreds of thousands of Silica Gel granules manufactured to a special size and sealed into a 12 cu. in. Mueller Brass Co. Deluxe Drier provide over 600,000 sq. ft. of the best drying surface you can get—more than enough to keep your refrigerant thoroughly dry at all times.

To date, more than 2,750,000 Mueller Brass Co. Driers have been installed in commercial refrigeration systems all over the world. The completely satisfactory service they have given wherever they were installed is proof enough that you just can't buy a drier anywhere at any price that will keep your refrigerant so thoroughly dry, so scrupulously clean and free from foreign matter. Mueller Brass Co. Driers are available in capacities from 3 cu. in. to 242 cu. in. Order now from your refrigeration wholesaler.

107

Comparison table: Silica Gel in Mueller Brass Co. Driers vs. two other common commercial desiccants.

Desiccant	% of moisture absorbed, by weight, at normal temperatures*
MUELLER BRASS CO. SILICA GEL	8%
Commercial Desiccant A	4%
Commercial Desiccant B	3%

*Maintaining Freon 12 at 30 parts per million moisture concentration.

MUELLER BRASS CO. PORT HURON 9, MICHIGAN

Figuring Residential Cooling Loads--

(Concluded from preceding page)

a by-pass system or re-heat system in order to control the temperature of the air entering the room. As I stated before, we recommend that you do not supply air into a room at a temperature greater than 20° below room temperature.

Sometimes it is necessary, in high humidity areas, to operate with a coil temperature of greater than 20° in order to accomplish the proper amount of dehumidification necessary to dry the air to give you the comfort condition that you desire.

In some installations it is necessary to go as high as a 30° temperature drop across the coil. Now this imposes a problem upon the equipment in the fact that it is necessary to drop the air temperature across the coil a total of 30° and still have only a 20° temperature drop below room temperature when the air passes into the room.

This can be accomplished by either by-passing some of the air around the coil and re-mixing the by-pass air off the coil in order to obtain the desired air temperatures or by actually re-heating the air as it leaves the coil up to the desired temperature.

With a re-heat system it is necessary to have a heat exchanger which is made of a material which will not rust and with a by-pass system it is necessary to have an extra system of ductwork installed in such a way that some of the air from the coil is by-passed around through the extra ductwork and re-mixed on the leaving side of the coil.

Now the question will enter your mind on what happens to the moisture and heat in the air that travels around the coil. Naturally, by by-passing the air around the coil we allow some of the heat and the air to by-pass the coil and it is not removed by the conditioning equipment. However, it is not a point of worry because it is like the proverbial story of the frog and the log.

As the story goes, the frog jumps from the end of the log half the distance to the other end and with each successive jump, jumps half the remaining distance. Theoretically he never jumps off the log. He might get so close to the end he will fall off but theoretically he never jumps from the log.

Desired Conditions Eventually Reached

This is the same as with a by-pass system of air conditioning. As the air is mixed leaving the coil, entering the room and coming around to the coil again, this re-mixed air is dehumidified further on each pass and eventually the desired room conditions are obtained.

My two remaining points on installation of equipment are correct line and fuse sizes and sufficient supply of water. Gentlemen, the greatest difficulty that a manufacturer encounters in selling summer air conditioning equipment is the lack of attention to correct electrical service sizes and water supply on the part of the installer.

Get OK from Power Company

Make sure that the overloads in your motor starters and fuse sizes in your electrical disconnects and fuse boxes are of adequate size and are according to the manufacturer's recommendations. Also, make sure that you have the OK from your power company that the service into the building is of sufficient size to handle the rated load of the equipment which you are installing.

This problem has not been as great in commercial air cooling because commercial air conditioning is located in areas where transformers are generally of sufficient size to handle this equipment and services into buildings have been rated to handle the extra load. I do not say, however, that in all commercial installations this trouble has never been encountered. The commercial air conditioning men have had their troubles too.

However, in domestic work the addition of, for instance, a 3 or 5-hp. load on the service into the home may have a very decided effect on the capacity of the transformer supplying electricity to the home. Be sure that you check with your power company to make sure that the electrical service is of such a size that will handle the load that you impose upon it. Be sure that the electrical installation conforms to your local and state building and electrical codes.

Also, be sure that the water supply into the building is of adequate size to handle the water requirements of the building as well as the water requirements of summer air conditioning equipment. The manufacturer of the summer air conditioning equipment is able to give you the water requirements under normal load conditions from which you can determine the pipe sizes necessary to satisfy the water requirements of the residents.

Dirty Air Filters Chief Service Complaint

On service work on summer air conditioning equipment, the chief cause of complaint is dirty air filters. Remember, gentlemen, that summer air conditioning equipment is not placed in a situation where the equipment is brought to the heat load as in a walk-in cooler or beer cooler or refrigerator, etc. The heat load is brought to the summer air conditioning equipment by means of ducts through which air passes and the air is used as a means of transferring heat by circulating so many cubic feet of air.

If a sufficient quantity of air is not circulated, the heat is not removed from the conditioned area at a sufficient rate to keep ahead of the heat entering the area and the temperatures and the humidity in the area will rise and produce a condition which is not desirable. This means that you must guarantee that the equipment will handle the quantity of air necessary to do the work.

If the equipment is not handling the job it can be because not enough air is being transmitted through the supply systems in order to handle the load. Not enough air is caused by several factors. These factors are dirty air filters, fan running too slowly, motor bad, or belt slipping. You will find that dirty air filters is the chief cause of this complaint.

Dirty air filters can be compared to a dirty air-cooled condenser in straight refrigeration work. As you know, dirty condensers cause 95% of the trouble with refrigeration. Of course, the trouble shows us in other ways such as high head pressure, loss of refrigeration, burnt out motors, etc., but it is still caused by dirt in the condenser.

In summer air conditioning work, the trouble shows up in high temperatures in conditioned area, long running time, poor efficiencies, high power bills, etc., but is generally traceable back to the fact that not enough air is circulating because of the dirty air filters.

Do Not Run System Without Air Filters

However, never run summer air conditioning equipment without air filters. If the filters are so dirty that the air will not circulate to the desired amount, do not remove the filters and attempt to run the equipment without the filters until additional filters are obtained.

Remember that a summer air conditioning coil is a dehumidifier and moisture forms on the surface of the coil. This surface is a better air filter than an ordinary air filter. The wetted surface of the coil will gather all of the dirt and particles in the air, cause them to deposit on the surface of the coil and in a very short time the surface of the coil is coated, the coil is plugged and will require a cleaning operation.

This can be prevented by the use of air filters and should never be allowed to happen by taking the air filters out while operating the equipment. A few pennies for air filters is a much better investment than the saving of the pennies and considerably more work in cleaning the coil.

My main point in this is: be sure and check the air filters on every air conditioning job you go out on and replace them if necessary. In stating "if necessary" I don't mean a ¼ in. of rug on the filter. If it is not possible to see light through the filter by holding the filter up to a light or window, it is time to replace the filter.

Fan Running Too Slow

Another cause of insufficient air is the fan running too slow, which could be because the motor is bad, the belt is slipping, or the fan bearings are tight. Of course, if the motor is bad and is turning over too slowly it is necessary to remove the motor, have it repaired and reinstalled.

If the belt is slipping it may be because the belt tension is not sufficient or because the belt is worn and needs to be replaced. If oil will not loosen the blower bearings or if they are scored, they must be replaced.

Don't Tighten Blower Belts Too Tight

A point in replacing the belts is to remember that blower belts are not tightened as tight as compressor belts. On the average, compressor belts are set up like violin strings by pulling the motor over as tight as possible in order to prevent slippage on the start of the condensing unit. The same point is true on a blower in that the belt should be tight enough to prevent slippage on the start but a blower starts at absolutely no load and only the load of the inertia of the wheel has to be overcome in order to start the wheel rolling. Therefore, the belts should be set quite loose.

Another reason for not tightening the belts on a blower too tight is that a tight belt greatly reduces the life of the bearings in the blower motor and blower itself and can cause considerable noise during operation of the system. Make sure that the motor and fan pulleys are in line. This will also cause considerable operation noise.

Incidentally, another cause of low air quantity is high duct resistance. Now you may well wonder how the resistance of a duct system can change because the ducts do not expand or contract in order to change their size. However, customers do like to play with dampers and registers and very often they will decide that a room should not have air conditioning in it and will close the register.

This means that the air off the fan must travel through the remaining registers with increased resistance and because of the increased resistance the air quantity is reduced and reduced air quantity in return causes a reduction in the capacity of the system which may seriously affect the amount of air conditioning the equipment will handle.

Make sure that the system is in balance, the filters are clean, the fan and belts okay, etc., before you begin to condemn any part of the equipment unjustifiably.

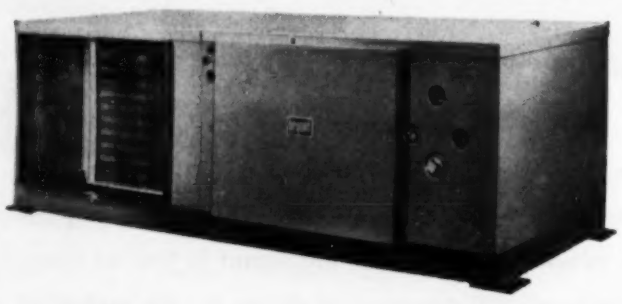
Here are your
PROFIT OPPORTUNITIES
with BRYANT air conditioning

A ROOM AIR CONDITIONER FOR MASS MARKET COMFORT SEEKERS!

The Bryant "551" Room Air Conditioner has what it takes to bring you a lion's share of this summer's big business in room coolers. It's smartly styled to satisfy every taste. It's available in 3 capacities—½, ¾ and 1 ton—to answer the cooling needs of any room. It's engineered to keep customers satisfied.

A DUCT AIR CONDITIONER FOR LOW COST YEAR 'ROUND HOME CONDITIONING

Many who want a completely air conditioned home cannot afford the cost of a centralized system. The Bryant "580" Duct Cooler gives you a practical solution to offer—a 3 ton conditioner that fits in existing duct work of a forced air furnace to provide an integrated year 'round heating and cooling system at unusually low cost. It's a real space saver, too!



THE FAMOUS "COMMAND-AIRE" TWINS FOR THE ULTIMATE IN YEAR 'ROUND HOME CONDITIONING

Here's the most revolutionary year 'round conditioning team available today—twin independent heating and cooling units of unusually compact design—available in a wide range of combinations. Gas or oil furnaces from 50,000 to 175,000 Btu/hr are matched with cooling units of 2, 3 or 5 ton capacity. Homeowners can install both units initially or add cooling later. And the price is unusually low. They're being nationally advertised—are enthusiastically endorsed by builders everywhere.

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BRYANT HEATER DIVISION · 17825 ST. CLAIR AVENUE · CLEVELAND, OHIO

The Bryant line looks good to me. Please send me the name of the nearest Bryant Distributor.

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COMPANY_____

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HERE'S MY INVENTORY OF DRIERS .. WITH FOUR SIZES OF ANSUL T-FLOS AND SEVEN FITTINGS I HAVE TWENTY EIGHT DIFFERENT COMBINATIONS OF INSTALLATION.. SAVES ME TIME AND MONEY!
DRIER
M. A. Cormack

SEE PAGE 27

RESTAURANT & BAR EQUIPMENT

Products Seen at the Restaurant Show

MELMAC plastic syrup jars and spoon holders, now being employed on all Dunhill soda fountains, are light in weight and resistant to breakage, according to Charles Pecorella and Carl Thaw.

ATTRACTIVE BEVERLEE WILSON demonstrates the features of the Frigidaire automatic ice cubelet maker. Cubelet is the designation used by Frigidaire to describe the ⅛-in. square produced by this ice maker.

FULL-VISION low boy display case which also features counter top was shown by Fogel along with a freezer and other items. That's William Fogel at left and Maurice Zatko at right.

Jordon Distributor Forms In Boston for 5 States

PHILADELPHIA — Formation of Jordon Distributors, Inc., of Boston, at 790 Commonwealth Ave., was announced by Harry Fogel, vice president in charge of sales for Jordon Refrigerator Co.

Frank B. Semple, a veteran in the major appliance industry, is president and treasurer of the new distributing company, Fogel announced.

Jordon Distributors — Boston will handle Jordon's domestic line in Maine, Vermont, New Hampshire, Massachusetts, and Rhode Island.

To handle distribution of Jordon products in western Massachusetts, the Boston distributor has appointed L. L. Del Padre Associates, 236 Chesnut St., Springfield.

Issuance of this franchise in the Boston area marks the first step in a long-range plan by Jordon to set up similar distributorships throughout the nation, Fogel said.

Lee Heads Metal-Air's New Branch In Jacksonville, Ill.

SPRINGFIELD, Ill. — Edward L. Pruitt, president of Metal-Air Corp. here, has announced the opening of a branch in Jacksonville, Ill., and the appointment of V. N. Lee as acting branch manager.

The branch will carry Coleman air conditioning and heating equipment and other products and will specialize in domestic and commercial sheet metal contracting in addition to roofing work.

Art Curran

Hugh Cooper

Curran, Cooper Get New Tyler Sales Posts

NILES, Mich.—Hugh Cooper, formerly supervisor of agency sales, Tyler Fixture Corp., became sales manager, Harderfreez Div., on June 1, according to J. W. Krall, executive vice president.

Effective the same date, Art Curran, Tyler divisional manager, moved into the post vacated by Cooper.

A member of the Tyler organization since 1946, Cooper has served in various sales capacities, including that of assistant sales manager. His new responsibilities include the full direction of sales policies for the company's line of Harderfreez home freezers.

Curran originally joined Tyler in a production capacity in 1941. After an extended military leave of absence during World War II, he rejoined the firm in 1946 as a member of the commercial sales force.

As divisional manager, he formerly covered the western territory for the company.

2 New Products Added To 'Beverage-Air' Line By Punxsutawney Co.

PUNXSUTAWNEY, Pa. — The Punxsutawney Co. announces the addition of two new products to the "Beverage-Air" line of cooling equipment—cafeteria bottle coolers and storage cabinets.

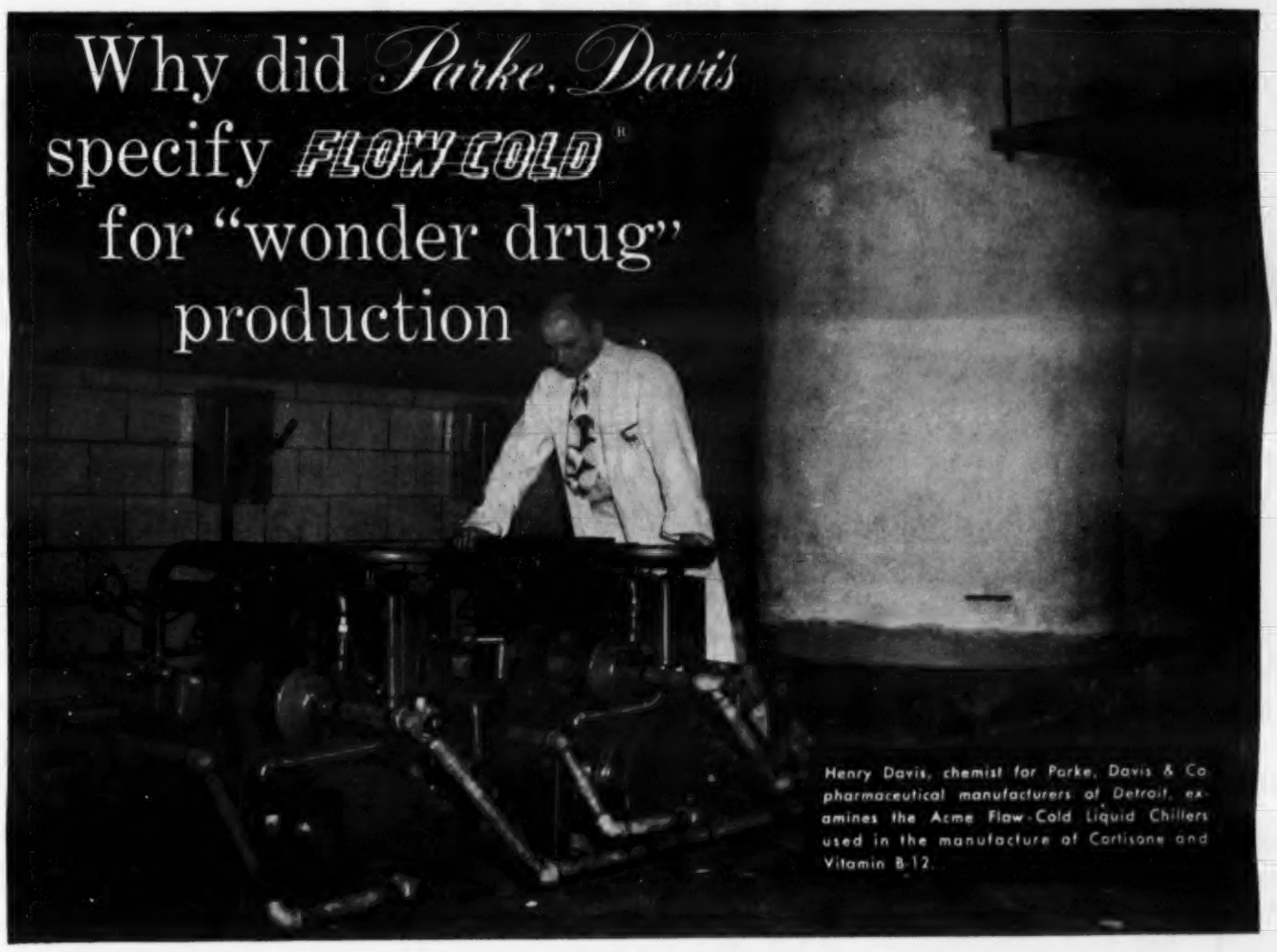
Said to be ideal for school installations, the cafeteria bottle coolers have the same basic cabinet design as the 48-in. and 63-in. regular self-contained bottle coolers, except that the entire top section is covered by large stainless steel lids, either hinged or the sliding type. A stainless steel rail with rounded corners extends around all four sides of the cabinet top.

Provisions are made for mounting large cap catchers on either or both sides of the cabinet although only one is supplied as standard equipment. The design permits service from both sides of the cabinet. All models have stainless steel tops, sides, and ends optional in either enameled or stainless steel.

The new Beverage-Air storage cabinets for kegs are similar to the Beverage-Air DD 63 and DD 94 draft system cabinets except that no tapping facilities are provided and the top consists of one flat piece, according to the company.

Adjustable wire shelving for bottled goods can be added as an accessory.

Exterior finishes can be had in either all tan hamerene enamel or stainless steel top, front, and ends with enameled backs.


Why did Parke, Davis specify FLOW-COLD® for "wonder drug" production
Henry Davis, chemist for Parke, Davis & Co. pharmaceutical manufacturers of Detroit, examines the Acme Flow-Cold Liquid Chillers used in the manufacture of Cortisone and Vitamin B-12.

Acme's packaged liquid chillers provide efficient operation with lower installation and maintenance costs

Throughout the manufacturing process of the new "wonder drugs" — cortisone, eschatin, and Vitamin B-12 — modern industrial refrigeration plays an important role. At one phase two Acme Flow-Cold Packaged Liquid Chillers (3 h.p. capacity) hold 15 gallons of alcohol per minute at a constant 35 degree Fahrenheit temperature. Later in the process another Acme Flow-Cold maintains an ethylene glycol solution at a minus 10 degrees Fahrenheit.

Parke-Davis selected Acme Flow-Cold Chillers because of the time and money that could be saved in building the system. Each Acme Flow-Cold is shipped from the factory completely assembled and pre-tested. Installation of a complete chilling system is accomplished in a matter of hours. These installations were so successful Parke-Davis reordered more Flow-Cold units to control the temperatures of other chemical processes.

Write today for catalog AC.

ACME INDUSTRIES, INC.

JACKSON, MICHIGAN

Mfgs. of a complete line of Air Conditioning and Refrigeration Equipment

Evaporative Condensers
Cooling Towers
Floor-type Unit Coolers

Direct Expansion (Dry-Ex) and Flooded Liquid Chillers
Heat Exchangers, Oil Separators

Shell and Tube, Shell and Coil Condensers
Receivers, Pipe Coils

Packaged Liquid Chillers to 225 tons

Flow-Temp Heat Pumps
Flow-Cold Liquid Chillers

Remote Room Conditioner

Continuously serving the refrigeration and air conditioning industry since 1919

NOW.. THE ICE-CUBER YOU CAN COUNT ON

FULLY AUTOMATIC

ICE-FLO!

(SINCE 1947)

FIVE ICE-FLO MODELS—

Sizes from ½ h.p. to 1½ h.p. The smallest makes 2520 deluxe size cubes daily. The largest delivers 10,800 per day. Pull out storage cabinets hold from 8 to 12 hrs. production.

THE ORIGINAL Solid-Cube Ice Maker for Hotels, Restaurants, Clubs, Bars, Cafeterias, Schools, Hospitals, Institutions, Drug and Chain Stores.

A DOOR-OPENER to better ice service, Ice-Flo automatically produces sparkling clear, solid, extra-large ice cubes in quantity at point of use. They neither mat nor stick together. Freezing compartment is self-cleaning. Cubes last longer in drinks and in storage because they are solid.

DEPENDABLE · ECONOMICAL · STURDY

WRITE FOR DETAILED INFORMATION

Esmond Manufacturing Company

ESMOND RHODE ISLAND

What's New

When requesting further information on new products, please use "Information Center" form.

Automatic Clothes Dryer Is Only 24¼ In. Wide

—KEY NO. C-620—

ST. JOSEPH, Mich.—A compact automatic clothes dryer, designed for small apartments and homes, trailers, camps, boats, and for wherever space is at a premium, was announced here recently by Whirlpool Corp.

Exactly 24¼ in. wide, barely the waist measurement of a Miss America, the new dryer has full 8-lb. capacity of dry clothes, equivalent to the maximum load of many "standard size" dryers of much larger dimensions.

Casters for the electric dryer, available as optional equipment at slight extra cost, make it easy to move the dryer for storage if space is too tight for a permanent location.

Manufactured for use with either gas or electricity to retail at approximately $249.95 and $199.95, respectively, the new completely automatic dryers offer price as well as space economy. Over-all dimensions of both gas and electric models are 36 in. high, 24¾ in. deep and 24¼ in. wide.

The new compact dryer is a counterpart in dimensions, and similar in appearance, to a compact automatic washing machine introduced early this year by Whirlpool. The washer also holds a full 8 lbs. of laundry and retails at approximately $239.95.

A retractable caster-base, which permits the machine to be moved easily when not in use, is now in production and will be available within the next 30 days at slight extra cost.

The new automatic dryer and matching washer, with a total span of under 49 in., will be merchandised as "The Compact Couple."

12.7-Cu. Ft. Upright Fits Into Narrow Space

—KEY NO. C-621—

DULUTH, Minn.—A new "space-saver" upright freezer will be added to the Coolerator line at the Summer Market in Chicago, according to G. L. Rees, president.

Only 31 in. wide, the UFB-125 freezer will provide 12.7-cu. ft. capacity and will hold up to 445 lbs. of frozen foods.

For fast efficient freezing, this model is equipped with new-type expanded metal shelving which is claimed to provide fast contact freezing plus better controlled cold circulation throughout the cabinet. Coils are brazed to shelves. One-piece design offers "unusual strength and rigidity."

The company said a special ice cube freezing shelf "facilitates faster freezing of ice cubes by direct contact with coils without the fuss and bother of rearranging foods in the regular storage compartment."

The middle shelf is adjustable to three positions. It may be raised or lowered to accommodate large or bulky articles. Extra shelves are provided on the door.

A sliding basket in the lower food compartment is included for storage of irregular items. Mounted on nylon rollers, it rolls out for easy loading and unloading.

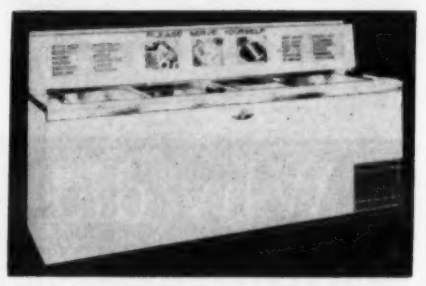
The cold control is located on the breaker strip at the top of the cabinet out of the reach of children. It may be set from 0° F for normal storage to -10° F. for faster freezing.

Thirty pound pull of the snap action latch reportedly assures positive door seal. The door liner is vented to minimize food odors and condensation. Self-levelling gliders are another feature.

The freezer is powered by a hermetically-sealed ¼-hp. compressor, internally spring mounted. Refrigerant is "Freon-12."

There is a five-year warranty on the refrigeration system plus a free five-year food warranty up to $150 to protect consumer against loss of frozen food due to mechanical or power failure.

The UFB-125 is designed as a companion piece to the Coolerator refrigerator for home kitchen installations.



Heating Element Retards Fogging on Ace Cases

—KEY NO C-622—

NEW BEDFORD, Mass.—A line of self-service frozen food display cabinets that are self-contained and will hold from 495 to 1,170 standard frozen food packages, has been introduced by Ace Cabinet Corp. located here.

The cabinets feature a special low wattage heating element that considerably reduces condensation. It is installed beneath the lower door track and slows condensation enough to assure clear visibility into the interior through the sliding glass doors.

All dividers are equipped with defroster channels. The top of the cabinet is made of one-piece highly-polished stainless steel with stainless steel runners for the doors. Heavy non-conducting breaker-strips separate the evaporator from the top.

The condensing unit is hermetically sealed and is made accessible for cleaning and servicing by a "glide-out" mechanism. Zero and below zero temperatures can be maintained.

Heavy-gauge body is finished in triple baked white enamel and completely insulated with corkboard and rigid glass fiber. Superstructure is one-piece, welded for added strength, and streamlined in appearance. It is furnished with color pictures, product strips, and prices. Illumination is provided.

Deluxe Features Added to Medium-Priced Range

—KEY NO. C-623—

CHICAGO—A new medium-priced, single-oven electric range controlled by lighted pushbuttons has been introduced by Hotpoint Co.

The new unit (model RD-17) incorporates many deluxe features of higher-priced ranges, including a new "oversize" oven with 4,700 cu. in. of useable oven space, a "super calrod" surface unit that is "30% more efficient," and a new plug-in "golden bake" heating unit that circles the entire oven floor, simplifying baking and eliminating oven heat baffles.

The model has a 220-volt outlet on the control panel for the automatic deepwell french fryer recently introduced by Hotpoint on more expensive ranges. This unit will be sold as an optional accessory.

John F. McDaniel, vice president, marketing, said introduction of the new model to dealers will give them a more competitive price position.

Also included in the new model are the standard color key system, oven and surface unit pilot lights, two speed electric time measure, full length flourescent light, deluxe aluminum broiler, "golden fryer" unit receptacle, a timed appliance outlet, an oven light, three storage drawers, roaster pan, and thrift cooker unit.

Information Center

For *more information* on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

Key No. ..... Key No. .....
Key No. ..... Key No. .....
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Products Advertised
(list name, page, and issue date)

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HERE'S HOW TO COVER
THE WATERFRONT
WITH Westinghouse
WATER COOLERS
LET'S GO SALE-ING
HERE'S A STEP-BY-STEP SCHEDULE TO LOG YOUR COURSE
A SALE-ING SCHEDULE TO HELP YOU LOG A TRUE COURSE TO PLUS PROFITS

Westinghouse Guide to
PLUS PROFITS

. . . of course, it's electric!

There's big profit in Water Cooler sales when you "Cover the Waterfront with Westinghouse". Every shop, beauty parlor, or small plant is a prospect for Westinghouse Compartment Water Coolers. The new Westinghouse Waterfront Sales Planner shows you how to turn these prospects into customers. Briefly, here's the "Cover the Waterfront" deal—install a Westinghouse Compartment Water Cooler on your floor and you get:

FREE COCA-COLA* . . . Westinghouse foots the bill for four cases of Coca-Cola to make your Compartment Cooler a popular place to pause. And to help you close a sale, Westinghouse foots the bill for four cases of Coke to every one of your customers that buys one or more of any model Westinghouse Water Cooler.

FULL-COLOR TEASER DISPLAY . . . Coaxes prospects to ask how come both cold water and ice cold Coca-Cola from the same cooler. Plus a FREE package of folders, banners, specification sheets, Pay-Way Computer, direct mail, etc.

WESTINGHOUSE PAY-WAY PLAN

Have you seen the new Pay-Way Computer prove to prospects that additional Water Cooler installations pay for themselves through payroll savings? Check a Westinghouse distributor for details on how this Pay-Way Plan will help you sell more Water Coolers. Ask your Distributor for a copy of the Waterfront Broadside . . . or write to . . .

WESTINGHOUSE ELECTRIC CORPORATION
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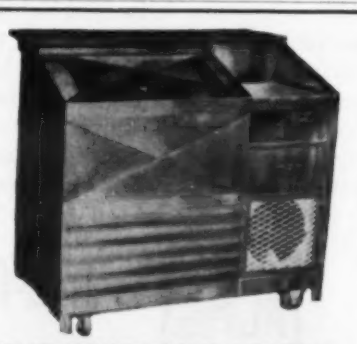

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Johannesen Heads NAED; Schiele, Barrett Named

CHICAGO—Robert M. Johannesen, president of Johannesen Electric Co., Inc., Greensboro, N. C., was elected president of the National Association of Electrical Distributors during NAED's 45th annual convention here.

Johannesen succeeds George F. Hessler, vice president of Graybar Electric Co., Inc., New York City. Hessler announced during the convention that he plans to retire as Graybar vice president before the next NAED convention.

Herbert S. Schiele, president of Artophone Corp., St. Louis, was elected a vice president of the association and chairman of the Appliance Div. He succeeds Benjamin Gross, president of Gross Distributors, Inc., New York City.

Lester E. Barrett, president of Barrett Electrical Supply Co., St. Louis, was re-elected a vice president and chairman of the Apparatus and Supply Div.

Dole Starts Expansion, Remodeling Program

CHICAGO—Dole Refrigerating Co. announces a $100,000 three-month expansion and remodeling program to be started immediately.

All new office facilities of modern design are being built on the second floor of the Dole plant at 5910 N. Pulaski Rd.

First floor space presently being utilized for the general offices and a new addition to be built will provide approximately 6,000 sq. ft. of additional factory space.

The company said this change will permit improved production line methods in the factory and should result in better service to customers.

Frank Trotter Dies at 78

ROCHESTER, N. Y. — Frank C. Trotter, 78, former member of C. W. Trotter & Sons, refrigerator manufacturing firm, died recently. In later years he had operated his own air conditioning company here.

Servel Reports Sales Of over $48 Million During 2nd Quarter

NEW YORK CITY—Net sales of Servel, Inc. for its second fiscal quarter ended April 30, 1953 totaled $48,245,413 compared with $15,746,561 in the similar period a year ago, W. Paul Jones, president, stated in a report to stockholders.

However, net profits for the period were lower, and the report said this reflected greatly increased advertising, selling, promotional, and other expenses inherent in the introduction of new products.

Net earnings for the quarter were $91,858 or 2 cents a share on the common stock outstanding, compared with $490,003 or 25 cents a share in the similar quarter of 1952.

PROMOTIONAL EXPENSES UP

Promotional expenses increased by $1,730,000 for the quarter. The report pointed out that "such expenditures are, of course, an investment to attain increased volume and largely account for the greater civilian sales volume for the period."

A breakdown of sales figures shows $20,030,416 of civilian products sold for the quarter compared with $9,996,922 in the 1952 quarter, and $28,214,997 of defense products compared with $5,749,639 in the like 1952 period.

For the six months ended April 30, 1953, Servel's net sales amounted to $87,571,278, compared with $23,162,788 in the similar period a year ago. Net earnings for the six months amounted to $288,790, compared with a net loss of $480,220 for the similar period a year ago.

Of the total sales for the six months just past, $28,225,457 were civilian and $59,345,821 defense, compared with $15,765,375 and $7,397,413, respectively, in the similar period a year ago.

Servel "has embarked on a far greater program of manufacturing and selling than at any other time in its history," the report stated. "The number of dealers displaying and selling Servel products is greater by several times than ever before."

The report said that lower proportionate profits had been anticipated because of the expense of promoting and selling the new products. For the six months' period advertising, selling, and promotional expenses increased by $2,868,000 over the similar period of 1952.

DEFENSE WORK DECLINING

Servel's level of defense business has begun to decline, according to the report. Its subcontract with Republic Aviation Corp. for wings will be completed in June.

"Subcontract operations for Republic's new Thunderstreak fighter-bomber are beginning to attain considerable momentum, however, and will continue to increase in scope throughout the year," the report added.

The company's defense backlog for aircraft wings and parts and other defense items amounted to more than $75,000,000 at the end of the fiscal quarter.

Demand for Servel room air conditioners is beyond current ability to produce, and the All-Year air conditioner is experiencing greatly increased volume of inquiries and sales, the report stated.

Directors declared the regular quarterly dividend of $1.12½ a share on the $4.50 cumulative preferred stock outstanding, payable July 1, 1953 to stockholders of record June 11, 1953.

Gross Says 1-Year Appliance Warranty Is Too Long, Recommends 90-Day Period

CHICAGO—The one-year warranty on new appliances doesn't make sense.

List prices better begin to mean something or radical action will be needed.

The appliance industry must be "taken off the bargain counter."

These were some of the observations of Benjamin Gross, retiring chairman of the Appliance Div. of the National Association of Electrical Distributors, made during NAED's 45th annual convention held here recently.

Gross, who is president of Gross Distributors, Inc., New York City, declared that the appliance warranty problem has never been thought through clearly to the dealer. Saying there is "no sense" in the one-year warranty—"it is too long," Gross asserted that records show service calls stop when the warranty expires.

He suggested that the appliance industry should adopt a policy similar to the 90-day warranty on automobiles.

Regarding list prices, Gross noted that he had been incorrectly quoted recently as advocating their immediate discontinuance. However, he emphasized, something would have to be done about them if current abuses are not checked.

In stressing that there is a great need to take the industry off the bargain counter, Gross said the public should be taught to buy a product on the basis of its merits and not because it can be purchased for a discount "down the street."

Gross also said demand must be created for the new products of the industry and attention given to building sales forces.

He called, too, for a new view on financing with respect to capital inherent in the product itself, and a new attitude on the industry pricing structure with respect to the cost of marketing. In addition, Gross charged that cooperative advertising and sales aids are being badly handled and need serious study.

Gross also asserted that advertising funds are being misused because of a lack of understanding of what the national market is—simply "the aggregation of local markets." He said such funds should be used for the benefit of individual markets, "not across the board."

New Dial Chart Simplifies Miracle Fabric Laundering

MANSFIELD, Ohio—A dial chart that explains and simplifies techniques for laundering today's miracle fabrics in the Laundromat automatic washer and clothes dryer is now available from Westinghouse Electric Corp. through its appliance retailers.

Recipes are presented in chart form for washing and drying garments made of acetate, woven nylon or dacron, nylon or dacron tricot (knitted), orlon, and acrilan, as well as curtains made of the washable miracle fabrics. Special helpful hints are given for ironing or laundering each type of miracle fabric.

Printed on special paper which resists moisture and dirt, the washing, drying, and ironing instructions on the dial are based on approved methods by the Westinghouse Home Economics Institute.

The new dial is primarily designed as a promotion item to help retailers sell more Laundromat automatic washers and clothes dryers. It can be used in direct mail campaigns, to build store traffic, as a give-away at mass demonstration store programs, and as a guide in dealer training.

Distributors, Inc. Handles I-H Line In Norfolk Area

CHICAGO — Distributors, Inc., Portsmouth, Va., has just been appointed to handle the distribution of International Harvester refrigeration products in the Portsmouth and Norfolk metropolitan areas.

Their territory will include the Virginia counties of Norfolk, Princess Anne, and Nansemond, and the North Carolina counties of Dare, Pasquotank, Camden, and Currituck.

The new distributor firm was organized in February under the leadership of G. A. Blumberg, a member of an old Portsmouth merchandising family. Vice president and general sales manager is Thomas M. Hughson, Jr., who has had extensive experience in the appliance field over the last 17 years.

In addition to the I-H line of refrigerators, freezers, air conditioners, and dehumidifiers, Distributors, Inc., also handles the Raytheon TV and electronics products and is acquiring other appliance items.

They recently completed a new, modern building with facilities for warehousing, delivering, and servicing their product lines.

COME AND GET IT!

FREE $61.30 PROMOTION KIT

for an order of 12 or more Westinghouse DEHUMIDIFIERS

... of course, it's electric!

YOU GET
- 4 Automatic Timers. List price, $35.80
- 4 Sets of Casters. List price, $9.00
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PLUS
- 100 Selling Folders
- 25 Sample Direct-Mail Cards
- 25 Sample Doorknob Hangers
- 20 Spec Sheets
- 10 Question and Answer Booklets
- Tell-All-Tags
- Window Banner and Sales Planner

BUY 4 OR MORE DEHUMIDIFIERS AND YOU GET ABSOLUTELY FREE

A Big $18.61 Display and Promotion Package

Dealers are selling thousands of Westinghouse Dehumidifiers by the amazingly successful *FREE HOME TRIAL PLAN.* 9 sales are reported out of every 10 Home Demonstrations.

Wherever there's moisture damage, you have prospects: In the home market: basements, utility rooms, darkrooms, recreation rooms, hobby shops, beach homes, libraries, storage rooms and many others. In the industrial market: warehouses, stores, toolrooms, restaurants, garages, bank vaults, beauty parlors, studios.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division · Springfield 2, Mass.

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WALL WIRE PRODUCTS COMPANY

A FOREMOST NAME IN THE MANUFACTURE OF DIVERSIFIED WIRE PRODUCTS OF SUPERIOR QUALITY

STANDARD AND LIGHT WEIGHT SHELVES OF ELECTRO-POLISHED SOLID STAINLESS STEEL

REFRIGERATOR SHELVES WITH CHROME PLATE, ZINC PLATE, PRO SEAL, TIN, OR PORCELIZED FINISH

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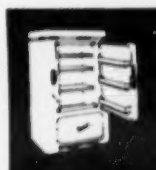
PLYMOUTH, MICHIGAN



"WOW!"

you'll say at the turnover and profits from Howard Home Freezers. Priced for food plans and quick retail sales in upright and chest models.

ONLY A FEW TERRITORIES LEFT FOR DEALERS, DISTRIBUTORS, and REPS—hurry! Write for details.

Howard REFRIGERATOR COMPANY, INC.
4745 Worth St., Phila., Pa.
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Replacement controls got you in a dither? Why mess around with makeshifts . . . when you can get the *right replacement* in short order from your Ranco wholesaler. When you stop to think there's a Ranco control for more than 4,000 replacements . . . far more than any other manufacturer . . . you'll never use any other!

RANCO CONTROLS

Ranco Inc.
COLUMBUS 1, OHIO

New Ranco Supplement Bulletin No. 1466
Contains dozens of exact replacement controls not previously available from any source! See a copy at your Ranco wholesaler.

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

Superior Valve Assigns Dodds to Eastern Area

PITTSBURGH — David G. Dodds, Jr. has joined the field sales organization of Superior Valve & Fittings Co. here, it was announced by George R. Allen, vice president.

David Dodds

Dodds will travel out of the firm's New York office and cover territory in New York and New England as an assistant to F. Neil Robson, district manager.

Having previously been associated with the sale of high pressure, refrigeration, air conditioning, and LP-Gas valves and fittings in New York, Dodds returns to a territory with which he is familiar.

Plan Cooling for New Bldg.

RALEIGH, N. C.—S. H. Kress & Co. has obtained a building permit for the construction of a three-story air conditioned building at 102-04 Fayetteville St.

Amana Inaugurates Service Training Procedure Series

AMANA, Iowa — A new service training procedure, designed to help dealers improve customer relations and thereby boost referrals, to produce a more efficient delivery technique and to reduce service expense, has been instituted by Amana Refrigeration, Inc.

The procedure is presented in a series of illustrated bulletins which present simple steps and precautions dealers should take in order to prevent service calls from cutting into profits on sales of Amana freezers, it was explained by Charles E. Nichols, service manager.

"Proper installation of the freezer is one of the three principal phases in merchandising appliances," Nichols said. "Other two are sales and service.

"More attention to proper installation, this too-often neglected phase of merchandising, would eliminate unnecessary service complaints and expense," he contended.

In the first of the bulletin series, called "You Made the Sale . . . Don't Lose the Profit," dealers are urged to:

1) Check the freezer upon receipt for any shipping damage;

2) Make certain freezer is installed in the correct place in the customer's home;

3) Properly level the freezer when installed;

4) Place the freezer in operation, checking fan blades, line voltage, setting temperature control and removing any shipping blocks and anchor straps;

5) Check the door gasket;

6) Demonstrate and explain operating procedure to the customer.

Dealers are reminded to have customers fill out warranty registration cards and mail them to the factory.

All the new illustrated bulletins are prepared for mounting in dealer service departments. They are being made available to dealers through Amana freezer distributors. A continuing program in service training is being planned, Nichols said.

Aerosol Oil Spray Loosens Rusted Nuts and Bolts

ST. LOUIS — A rust-cutting oil, sprayed from an aerosol can helps loosen corroded nuts, bolts, and studs, according to James R. Kearney Corp., makers of "Rust-Cutter."

The product, is particularly useful in freeing rusted fastenings on hard-to-get-at equipment like crossarm braces and switch gear boxes.

It is packed in an easy-to-hold 6-oz. can that dispenses a fine spray of the rust cutter when the valve is depressed. After a short spray from a distance of six to eight inches, the manufacturer says, a two-minute wait usually permits the compound to eat into the rust so the nut can be loosened easily.

AT THE "QUESTION BEE" SESSIONS conducted by The Harry Alter Co., refrigeration parts and supplies wholesaling division, Walter Shrum (left) and George Barr (right), Chicago refrigeration servicemen, listen attentively as Howard Shilling, Penn Electric Switch Co. representative, explains a controls problem.

GETTING SOME UP-TO-DATE information on the correct application of new refrigeration tools and accessories, Howard Huberger of the Drexel Ice Cream Co. confers with Richard Nelson, Imperial Brass Mfg. Co.

DEMONSTRATIONS DEVICES enable William Krueger, A-P Controls Corp., to show Ken Larwin, Refrigeration Maintenance Corp. of Chicago, how new products take care of such problems as motor overload.

"TERRACED" DISPLAY STANDS permit showing of various models. Here Frank Bork, Bork's Refrigeration, talks over a compressor problem with Irving Wilson of Tecumseh Products Co.

Servicemen, Wholesaler, Mfr. All Benefit

Wholesaler's 'Question Bees' Gives Manufacturers Chance To Answer Customers' Queries on Products

CHICAGO—A series of three-day "Question Bees" at which refrigeration parts and supplies manufacturers set up displays and provide representatives to answer questions has been staged with considerable success by the Harry Alter Co., parts wholesaler here.

"We arranged with the manufacturer to set up an interesting educational exhibit at our wholesale parts counter and they have one or two representatives to talk to our customers and answer their questions about their particular products," Irving Alter explained.

"This promotion has worked out very well and we think that the manufacturers, as well as ourselves, received a lot of benefit from it."

Each question bee was held for a period of three days—Tuesday, Wednesday, and Thursday in each case. Only from three to five manufacturers participated in each bee.

Alter's customers were notified of the question bee through outsize postcards. These cards told the customer who was going to be on hand and what products would be displayed, and invited him to come in at any time during the day and ask questions about the products displayed. The manufacturer's representative was prepared to explain his products, demonstrate them, and help the customer solve his problems.

Alter emphasized that the question bees were completely informal and were not a meeting.

A TEMPRITE OIL SEPARATOR automatically returns oil to the compressor, keeps it out of the lowside coils; results in more rapid heat transfer (frequently as much as 15% to 20%). The crankcase oil level remains constant at all times, and dirt, scale and core sand is filtered from the system.

Temprite
OIL SEPARATOR
helps keep large air conditioning systems at constant peak efficiency.

This is a true case history—A large air conditioning system in a midwest industrial plant (part of which is shown above) had been operating for a number of years *without* a Temprite Oil Separator. Maximum efficiency was never attained. Oil floating through to the system lodged in the evaporator coils, congealed in the expansion valve, reduced thermal conductivity of the condenser . . . . all in all resulting in erratic operation.

Immediately after installation of a Temprite Oil Separator, the system cleared up. The evaporator operated at proper temperatures; power consumption was reduced, the thermostatic expansion valve operated correctly, and greatly extended life of the compressor was assured.

Install a Temprite Oil Separator on every air conditioning and liquid cooling installation to assure maximum efficiency, operating economy and longer equipment life. Models from 1/6 to 150 h.p. capacity.

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Self-Contained Water Coolers · Remote Water Coolers · Cooler Carbonators · Control Valves · Instantaneous Liquid Coolers · Oil Separators · Beer Coolers
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☐ Please send me complete data on Temprite Oil Separators
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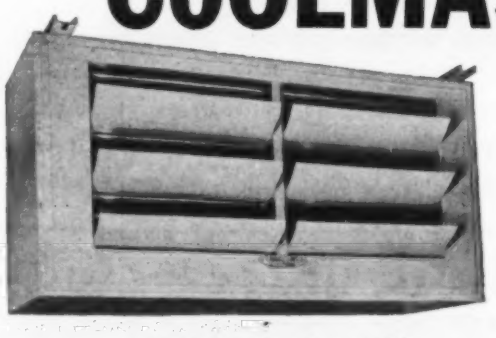
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The product cooler with an enviable record of fine performance. Available in five sizes, ranging from 10,000 to 60,000 BTU's.
Write for Catalog R-225
KRAMER TRENTON CO. • Trenton 5, N.J.

HOW TO APPLY VALVES

By A-P Controls Corp., Milwaukee

First three instalments in this series discussed automatic expansion valves. With this article we begin an outline of thermostatic expansion valves, showing how they differ from the valves discussed first.

The series is based on excerpts from the "Product Application Manual" recently prepared by the sales department of A-P Controls Corp. and is published with permission.

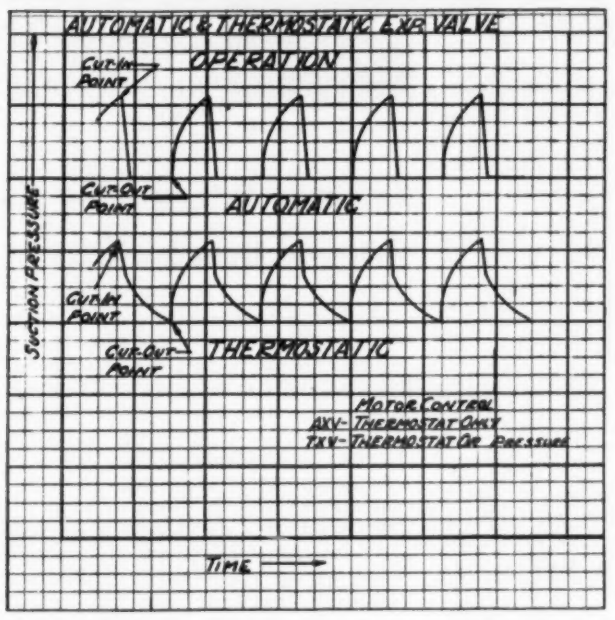

FIG. 2—Comparison of automatic thermostatic expansion valve performance.

Thermostatic Expansion Valves (1)

PERFORMANCE OF THE VALVE

Thermostatic expansion valves represent the most commonly used type of refrigerant control for commercial refrigerating applications. The performance of thermostatic expansion valves on mechanical refrigerating systems is such that maximum evaporator efficiency is maintained at all times as the metering of refrigerant to the system's low side (evaporator) is in direct response to the heat load imposed.

Because the valve meters refrigerant to maintain maximum evaporator capacity and efficiency at all times, and due to the metering of refrigerant at a rate proportionate to the heat load to be handled, thermostatic expansion valves are ideally suited to commercial and other applications where varying heat loads are the general rule.

METHOD OF REGULATING REFRIGERANT FLOW

Thermostatic expansion valves meter the flow of refrigerant to evaporating coils to maintain a predetermined number of degrees of superheat at the evaporator outlet. Refrigerant is fed to the evaporator at a rate to assure maximum utilization of evaporator surface, yet prevent the passage of raw liquid to the system's suction line with possible continuation to the compressor.

Determined by the valve adjustment ,a certain number of degrees of superheat must be picked up by the refrigerant gas before passing the valve's thermal bulb location.

As a result, the full evaporator surface is utilized because liquid is fed to the low side in sufficient quantity to bring refrigerant liquid well up to the end of the evaporator coil, yet only superheated gas leaves the evaporator to assure the passage of no raw liquid from evaporator to condensing unit.

Due to the design and operation of thermostatic expansion valves, the balance in a refrigerating system employing this expansion device is between expansion valve and refrigerating system heat load. As heat load increases and refrigerant liquid boils more rapidly in evaporator coil, the suction gas passing the valves bulb location will increase in temperature (superheat).

The thermal bulb responds by increasing the pressure on the valve diaphragm and the degree of valve opening is increased with resulting increase in rate of liquid flow to the evaporator coil.

If the system heat load is decreased, the opposite valve reaction takes place. Thermostatic expansion valves are therefore at all times responsive to the mechanical system's heat load, and consequently regulate the flow of liquid refrigerant to obtain maximum evaporating capacity.

TYPE OF AUTOMATIC SWITCH

As mentioned, thermostatic expansion valves are ideally suited to applications requiring close control of refrigerant flow to meet conditions of varying heat loads. The adaptability of this type of expansion device is reflected in its general popularity and its employment on a wide variety of refrigeration applications. Thermostatic expansion valves may be employed with either low pressure type or thermostatic type of automatic switch (motor control), a factor which adds further to their general utility and flexibility.

(To Be Continued)

How To Install New Ansul 'T-Flo' Drier

A new type drier which recently came on the market will interest servicemen because its method of installation differs somewhat from driers previously available.

Called the "T-Flo" drier by its manufacturer, Ansul Chemical Co., the drier is installed by means of a tee fitting which is available for either flare or solder connections.

Method of installation on soft copper lines is as follows:

First cut and flare tubing as shown in Fig. 1.

Next, insert the tee connector as shown in Fig. 2, and tighten the flare nuts.

Cellophane moisture seal is then removed from the drier shell, after which the seal cap is taken off the shell.

Old gasket on tee fitting is removed and replaced by new one provided with each drier shell.

Drier shell is then tightened in place.

A satisfactory, leak-tight connection will be obtained merely with hand tightening as shown in Fig. 3, the company claims. Hand tightening also means that no tools will be needed should the drier have to be replaced.

Wrenches may be used to tighten the shell in place, however, if desired.

FIG. 1—Tubing flared for tee.

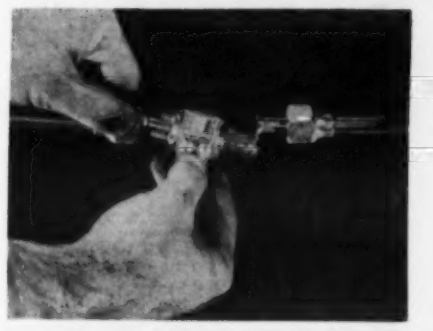

FIG. 2—Inserting tee connector.

FIG. 3—Shell tightened by hand.

HIGHER EFFICIENCY • GREATER CAPACITY • FASTER PICKUP
ANSUL
T-FLO DRIER
ANSUL
T-FLO DRIER
WITH
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THE HIGH-SPEED DESICCANT
Picks up moisture faster . . .
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than any other type or form of
desiccant or refrigerant drier.
Ansul T-Flo Driers are new in design, new in appearance and contain the remarkable new desiccant, ANDRITE. They provide greater capacity, higher efficiency and a faster rate of moisture pickup.
In addition they are easy to install and much easier to replace than the conventional types of refrigerant driers.
Buy them at leading refrigeration wholesalers everywhere
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MANUFACTURERS OF REFRIGERATION PRODUCTS, INDUSTRIAL AND FINE CHEMICALS, LIQUEFIED GASES AND FIRE EXTINGUISHING EQUIPMENT

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of Packaged Air Conditioning Pioneering

One of the First in the Industry

Curtis units that were installed back in the days when packaged air conditioning was a novelty are still giving faultless service. Today's Curtis packaged units are better than ever . . . perfected by 15 years of experience.

YOU'LL SELL more packaged units when you sell these Curtis advantages:

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Signed.....

Refrigeration Problems

and their solution

by Paul Reed

For Service and Installation Engineers

Paul Reed

An Example of Practical Application Of Theory

In the Feb. 16 and 23 issues we explained why the moisture content of the liquid refrigerant in a cylinder is reduced as gaseous refrigerant is purged or pumped off. This article was entitled "Drying 'Freon-12' in the Cylinder."

Some of our readers will perhaps be interested in the comments on this article from a reader in South India with whom we have exchanged a number of interesting and pleasant letters on various subjects.

Climatic conditions there are severe, adequate supplies are not always immediately available, and electric current is sometimes off for extended periods. At the time a recent letter from him was written, they were awaiting the monsoons (rainy season) to bring them enough water to operate the hydro-electric power plants. Meanwhile, the refrigeration equipment was being operated by gasoline and diesel engines.

Such conditions call for considerable self-reliance, ingenuity, and a thorough knowledge of the basic principles of refrigeration, electricity, and internal combustion engines. And refrigeration is badly needed, too, for his letter includes this sentence.

"The weather here is beastly hot, and the thermometer on my table records 105°." Perhaps a realization of the difficulties under which he must operate will enable us to better appreciate our own blessings and keep us from feeling sorry for ourselves when we think we are having a rough time of it.

His comments on "Drying 'Freon-12' in the Cylinder" are quoted from his letter:

"Regarding your article on the moisture in refrigerant cylinders, I am very certain that 99% of the servicemen did not know that this sort of peculiarity took place, and the information given in that article should benefit them a great deal.

"I remember sometime back when I was working on a low-temperature job of about -20°, that I unexpectedly ran short of gas, and had to get an extra supply from the distributor.

"I found on charging this new consignment of gas into the system, that moisture trouble suddenly cropped up, although there had been no moisture trouble previously. Where then, did the moisture come from except from the new gas?

"Of this I felt certain, so I raised merry Ned with the distributor, charging him with supplying me with 'Action-6' instead of 'Freon-12.' As you know, 'Action-6' is manufactured in England, and has the same composition as 'Freon-12,' but the moisture content is somewhere in the vicinity of 25 p.p.m. ('Freon-12' has a maximum of 10 p.p.m.).

"The distributor assured me that the gas he sent me was genuine 'Freon-12,' and that the cylinder was factory filled, and he showed me his invoices to prove it. I then wondered where the moisture had come from; but after reading your article, I know how it got there.

"You might be interested to know how I eventually overcame the difficulty. Well, I let out all the gas from the unit, and then dehydrated the unit by the heat and vacuum method.

"Then I took an empty service cylinder, removed the valve, and put a pound of fresh, dry silica gel into the cylinder, after which I of course replaced the valve. To be sure that the silica gel and the cylinder were dry, I warmed and evacuated the cylinder, just as I had the unit.

"I then put the amount of refrigerant that I required for the -20° job into this service cylinder with the silica gel in it, and I continuously oscillated the service cylinder so that the gas would come into good contact with the silica gel.

"Moreover, I kept the gas in the service cylinder for a full day, after which I proceeded to charge the gas from the service cylinder into the -20° unit.

"To be sure that the silica gel would absorb as much moisture as possible, and retain it, I kept the service cylinder in an ice water bath while I was charging from it into the unit. With the gas cold and its pressure low, it took a long time to charge it all into the unit. Nevertheless, I succeeded in drying the gas sufficiently so that I had no further trouble with the -20° unit, and this, of course, was the main thing.

"This process may appear to you to have been laborious, but when one is in the dark, one may have to adopt a trial-and-error method. If a similar job should come my way in the future, I am certain that I will finish it in one-fourth the time by using the method of drying the refrigerant in the cylinder, described in your article. So 'theory' does have a practical application!"

This portion of the letter from our reader in India is quoted to share an interesting letter with our readers, and to remind them of the article of Feb. 16 and 23; and to suggest that if they missed reading it, they do so, as it may be useful to them sometime.

DETERMINING THE PROPER CHARGE

QUESTION:

A water cooled ½-hp. unit was nearly out of charge. Its regular charge is about 14 pounds of "Freon 12.". I found the leak in the line, but I only had 5 pounds of "Freon-12." I pumped the system down to a 22-inch vacuum and put the 5 pounds in.

Then I opened the receiver valve, but my gauge did not rise and still showed a 22-inch vacuum. What would cause this?

ANSWER:

Apparently there is a stoppage of some sort between the receiver and the evaporator. Just where this stoppage is can only be guessed at; and it is going to be necessary for you to hunt for it.

However, the following are some suggestions as to where this stoppage may be located.

The receiver service valve. This is a bit unlikely, but there have been cases in which the stem of the valve was broken. Thus, the valve may close, but when the stem is unscrewed to open the valve, the lower part of the valve stem stays on the valve seat.

It is more likely that the stoppage is in a screen, drier, solenoid or other accessory in the liquid line, or in a screen of the expansion valve. It is possible that the needle of the expansion valve itself is stuck closed.

Start at the expansion valve and work back along the liquid line, by loosening flare nuts until you start to get liquid.

"It sparkles like a diamond"

Almost all ice makers accumulate impurities from the water supply and from the air. Deposits of lime, slime and dirt are the result. These contaminants not only ruin operating efficiencies, but cause such common complaints as opaque ice, cube lock, slow freezing, offensive odors and tastes.

Ice Machine Cleaner Powder is the safe, sure way of cleaning automatic cube or flake ice machines. It is packed in individual 8 oz. pliofilm bags. One bag dissolved in the water tray or freezing compartment and allowed to circulate for a few minutes cures the trouble. It will not injure the machine or its polished surfaces. It is not harmful from a health standpoint when used as directed.

"Virginia" also distributes two other good remedies for sick cooling towers, "evaps" and condensers. One is *Solvex Cleaner Tablets and Grains*,* for thoroughly cleaning fouled equipment and reducing high head-pressures in a matter of minutes. The other is *Solvex Maintenance Tablets and Grains*,* for preventing accumulations of dirt, slime, algae growth and scale which cause the trouble in the first place. Both are as reliable as the name "Virginia" which is back of them. Ask your wholesaler for these fine products, or write

VIRGINIA SMELTING COMPANY
Dept. 63, West Norfolk, Va.

*Manufactured by the CHEMICAL SOLVENT CO., Birmingham, Ala.

VIRGINIA Refrigerants

ESOTOO • V-METH-L • KINETIC CHEMICAL'S "FREONS"
CAN-O-GAS • PERMAGUM • PRESSTITE TAPE
SOLVEX PRODUCTS • SUNISO REFRIGERATION OILS

Farr Co. Appoints 3 New Representatives In South

LOS ANGELES—Farr Co. of Los Angeles announces the appointment of Air Filter Sales & Service Co., Jackson, Miss. and Air Filter Sales & Service Co., Nashville, Tenn. as representatives in their respective areas for Far-Air products.

Marshall, Neil & Pauley, Inc., Texas and Louisiana representatives for Farr, have organized a subsidiary company in New Orleans, the Air Filter Co., to handle Far-Air sales and certified filter service in the New Orleans territory.

H. A. Pietsch Co. Represents UsAirco In Tri-State Area

MINNEAPOLIS — H. A. Pietsch Co., Pittsburgh, has been named manufacturer's representative for the area including western Pennsylvania, West Virginia, and eastern Ohio by United States Air Conditioning Corp.

The company was recently formed by Herman A. Pietsch, former chief engineer for the heater division of Dravo Corp. Pietsch is well known throughout the industry for his activities in the American Society of Heating & Ventilating Engineers, and is at present a member of the special committee on testing and rating codes of ASHVE.

Crowe Represents Dean In Lower Mississippi Area

BROOKLYN—Dean Products, Inc., manufacturer of job-tailored cold plates, announces the appointment of Robert H. Crowe as Dean representative covering Oklahoma, Texas, Arkansas, Louisiana, and the city of Memphis, Tenn.; also the counties of Warren, Hind, Rankin, Scott, Newton, and Lauderdale in Mississippi.

R. H. Crowe

Kathabar Extends Line of Chemical Dehumidifiers

TOLEDO—To meet the demands of industrial processors for continuous production in operations involving the use of air at sub-freezing temperatures, the Kathabar Div. of Surface Combustion Corp. here has extended its line of low temperature units to handle up to 17,000 c.f.m. in indivdual units.

Requirements for air at sub-freezing temperatures, down to -100° F. are found in the confectionery, pharmaceutical, brewery, aircraft, meat, plastic, food, and other industries. Previous to the development of these units, air at these low temperatures could only be supplied wth straight refrigeration equipment subject to periodic shutdown for defrosting, the company said. The efficiency of those operations was also impaired because of the insulating effect and air throttling action of frost formation.

These Kathabar units will also deliver air at 25 to 30° F. lower dewpoint than the dry-bulb temperature of the air. In many cases this characteristic eliminates the necessity of cooling the air to the required dewpoint temperature. Since the dewpoint may be 25 to 30° F. lower than the dry-bulb temperature required, substantial refrigeration savings are afforded, Kathabar claims.

The Kathabar low temperature units, modifications of conventional units for obtaining low absolute humidities, are provided with increased air moisture-absorbing capacity through the use of refrigerants, such a brine, methanol, ammonia, "Freon," and chilled water, in the cooling coils.

Low dewpoint, sub-freezing air is supplied continuously and automatically to process areas without frost formation, assuring maximum time for operation of low temperature processes.

MISSING SOMETHING?

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Rochester · Pittsburgh · Lansing, Mich. · Los Angeles
Minneapolis · Akron · Hartford, Conn.

60,000 Air Conditioned Homes--

(Concluded from Page 1, Column 2)

inability of the air conditioning industry to produce additional units.

"Based on the most reliable estimates," he continued, "it now seems highly probable that in five years, assuming several business conditions that are favorable, we will find that one out of every two homes being built will be constructed to take advantage of year-round air conditioning.

"Currently there are some 50,000 homes in this country so equipped. By the close of 1957 the total should exceed 1,300,000 and at the end of 1958 I believe that the number may well pass the 2,000,000 mark. This projected sharp rise in the single year 1958 reflects another trend— this one within the air conditioning industry itself.

"Currently, the room air conditioner is enjoying a tremendous and growing popularity. Some 750,000 units may be sold by the industry this year, an increase of 82% over the number sold last year. And next year should see far higher production and sales figures.

"However, those who purchase units for single rooms will quickly realize the many benefits of air conditioning and will, I believe, become among the best future customers for complete home units that will heat in winter and cool and dehumidify in summer.

"As a result, I am convinced that by 1958 the dollar volume of sales of year-round residential units will catch up with and thereafter exceed that of room air conditioners for homes.

"This trend within the industry should be accelerated by the architects competition which has just been sponsored by Carrier Corp. In the prize-winning designs are to be found many interesting and fresh approaches to the planning of homes around complete air conditioning.

"But it is recognized that the ideal solutions will be developed over a period of time as architects and builders enlarge their experience in this field."

In comparing room air conditioning and year-round residential air conditioning, Wampler said they were both good but that the central station residential equipment undoubtedly provides the better job of air conditioning.

He lauded the press for its point of view on air conditioning and for its tremendous help in the promotion and acceptance of air conditioning.

The national grand prize of $5,000 in the Carrier contest was awarded jointly to Eduardo Fernando Catalano and Horacio Caminos, professors at the architectural School of North Carolina State college, Raleigh, for their winning submission, judged the best of 861 entries. This was a record number of contestants to enter such a competition.

Regional award winners, who received $2,000 each were: Richard J. Dimit, Cambridge, Mass., Lawrence Mallard and James L. Bennett, Greensboro, N. C., Joseph Burnett, Chicago, Abraham Geller and William Cox, New York City, A. L. Aydelott, Memphis, Tenn., and Thomas Bear, St. Louis.

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'Air Conditioned Life' Envisioned by Wampler

CHICAGO—Air conditioned streets . . . air conditioned cities . . . most, if not all, new homes air conditioned.

That's what Cloud Wampler, president of Carrier Corp., sees coming in the not-too-distant future.

Addressing the Appliance Div. of the National Association of Electrical Distributors, Wampler gazed into his crystal ball and saw this "air conditioning vision."

"Basically, I believe that, through air conditioning, man will become the master instead of the victim of his physical environment.

"To illustrate, let's take an average day in the life of John Doe. He will wake up in an air conditioned bedroom; eat breakfast in an air conditioned nook; drive an air conditioned car to work—in an air conditioned office or plant.

"He will have his evening meal in an air conditioned dining room; relax in an air conditioned movie—3-dimensional, of course—or sit in an air conditioned living room watching a colored television program originating from an air conditioned studio.

"Now, I should like to turn from one day to a lifetime. The baby will be born in an air conditioned delivery room. His first few days will be spent in the air conditioned nursery of a hospital. Then he will be taken to his own air conditioned home.

"In due course, he will go to a school that is air conditioned. And his church will be air conditioned, too. On his travels, he will take an air conditioned bus, or an air conditioned train, or—more probably—an air conditioned jet plane.

"And so on and so on. But eventually, after having lived a long, long time in better health and with more happiness, he will go at last to an air conditioned mortuary.

"As one of my colleagues has put it, air conditioning will prevail from the cradle to the grave.

"Returning now to the utterly serious, there is still more to my prophesy. I see, within the lifetime of many men in this room, these things: Air conditioned streets. Whole cities air conditioned from central plants. And I am very sure that long before our Diamond Jubilee in 1977, there will be few, if any, homes built in America that will not be completely air conditioned.

"Here is something that Dr. Carrier said to me when I was asked to take my present job: 'The time is almost here when men will no more let themselves and their families suffer heat and humidity than they now permit them to suffer from cold and storm'."

Philco Prices--

(Concluded from Page 1, Column 5)

motors, and plastic parts was given as the reason for the price rises.

The changed retail price structure is as follows:

REFRIGERATORS

Model No.	New Price	Old Price
733	$239.95	$229.95
733L	244.95	234.95
932	284.95	279.95
936	349.95	339.95
936L	359.95	349.95
1131	349.95	339.95
1131L	359.95	349.95
1137	419.95	399.95
1137L	429.95	419.95
1138	459.95	449.95
1138L	469.95	459.95

RANGES

233	$179.95	$169.95
235	199.95	179.95
431	209.95	199.95
432	259.95	249.95
435	329.95	319.95
437	379.95	369.95
835	369.95	359.95
839	469.95	449.95

FREEZERS

GH82S	$299.95	$279.95
GH82C	319.95	299.95
GH82	349.95	329.95
GH122	439.95	399.95
GH183	569.95	499.95

ASRE Lake Placid Meeting--

(Concluded from Page 1, Column 3)

ments, capillary tube selection, and others.

At the Domestic Engineering Conference to be held Monday, June 29, the broad subject of home freezers will be discussed from various technical angles by 10 speakers.

Tuesday's Packaged Air Conditioner Conference on residential air conditioning will include seven papers presenting the builder's view, design and installation problems, controls, water conservation, and the heat pump.

Entertainment features have not been neglected by the general convention committee, which is headed by R. A. Baker of Minneapolis-Honeywell in Syracuse.

Guests arriving Sunday, June 28, can enjoy an evening travelogue and a "Beat the Clock" audience particpation stunt.

Monday's "welcome luncheon" will feature a talk by Clarence H. Linder, vice president, engineering, General Electric Co., on "What the Future Holds for Our Industry."

An outdoor steak fry and square dance are planned for Monday evening, and the traditional dinner-dance is to be held Tuesday evening.

The annual golf tournament is planned for Tuesday afternoon while non-golfers take a sightseeing trip to Ausable Chasm and White Face mountain.

Schedule of Events

Major events of the convention have been programmed as follows:

SUNDAY, JUNE 28

10:30 a.m.—Advance Registration, Post Office Lobby.

1 p.m.—Sections Committee luncheon-meeting, Bird room.

6 p.m.—Council dinner-meeting, White Birch room.

8:30 p.m. — Motion picture travelogue on the Adirondacks.

9 p.m.—"Beat the Clock" staged by ASRE professionals with audience participation.

10:30 p.m.—Refreshments.

MONDAY, JUNE 29

9:30 a.m.—General assembly, Agora theater. Opening remarks by President Richard C. Jordan. Welcome to Lake Placid and Central New York section by R. A. "Bud" Baker, chairman, Convention Committee.

9:45 a.m.—First Technical Session —Agora Theater, President R. C. Jordan, presiding.

"Cooling Tower Selection Chart and Its Application to Field Tests of Cooling Towers," A. M. Norris, Baltimore Aircoil Company, Inc.

"Air Cooling Coil Performance," D. D. Wile, Refrigerating Engineering, Inc.

"Year-Round Reflective Radiant Conditioning," C. A. Mills, University of Cincinnati.

"Technical Considerations Affecting Air Force Air Conditioning Requirements," W. T. Smith, U. S. Air Force.

9:45 a.m.—Domestic Refrigerator Engineering Conference—Forest Music Room, R. W. Ayres, Seeger Refrigerator Co., chairman, presiding.

"Upright and Chest Type Home Freezers," L. M. S. Cooper, Amana Refrigeration, Inc.

"Some Design and Operating Characteristics of the Upright Household Freezer," G. J. Fleck, the Cooler-ator Co.

"Steel Tube Freezer Evaporator Coils," R. E. Cappel, Crosley Division, Avco Mfg. Corp.

"Vapor Barriers in Chest Type Freezers," H. Mortensen, Deepfreeze Appliance Division, Motor Products Corp.

"Prevention of Exterior Sweating on Freezer Cabinets," R. L. Eichorn, International Harvester Co.

"Consumer's Influence on Design," Gilbert Strunk, Sears, Roebuck and Co.

"Some Unique Features in Home Freezer Design," J. A. McLean, Westinghouse Electric Corp.

"Choosing A Liner," R. B. Farnon, General Electric Co.

"Insulations in Home Freezers," L. E. Cover, Armstrong Cork Co.

"Interior and Shelf Finishes for Freezers," O. J. Spawn, E. I. du Pont de Nemours and Co.

1:30 p.m. — Welcome Luncheon Forest East Suites Dining Room.

Speaker: Clarence H. Linder, Vice President — Engineering, General Electric Co.

Subject: "What the Future Holds for Our Industry."

7 p.m.—Outdoor picnic and square dance at Council Fire Grounds.

TUESDAY, JUNE 30

9:30 a.m.—Second Technical Session—Agora Theater. Vice President A. J. Hess, presiding.

"A Discussion of Compressor Design—Including Some Unique Types," A. A. McCormick Engineering.

"The Effects of Internal Roughness on the Pressure Drop and Heat Transfer Characteristics of Integral Finned Tubes," V. R. S. Arni and J. E. Myers, Purdue university.

"Heat Transfer Film Coefficients for Refrigerants Boiling Inside Tubes," Merl Baker, University of Kentucky.

"Design Differences in Refrigerating Systems Due to Different Thermodynamic Properties of Two Refrigerants," Leon Buehler, Jr., Creamery Package Mfg. Co.

9:30 a.m.—Packaged Air Conditioner Conference — Forest Music Room, Justin Neuhoff, General Electric Co., chairman, presiding.

Subject: Residential Air Conditioning.

"A Builder Looks at the Residential Air Conditioning Problem," Emanuel Spiegel, president, National Association of Home Builders.

"Design Consideration in Combining Summer and Winter Residential Air Conditioners," R. M. Thompson, Bryant Heater Division, Affiliated Gas Equipment, Inc.

"The Installation of Packaged Air Conditioning Equipment in Modernizing Existing Homes," W. B. Cooper, American Radiator and Standard Sanitary Corp.

"Residential Air Conditioner Control Systems," F. Y. Carter, Detroit Controls Corp.

"The Water Conservation Problem," R. E. Holmes, Worthington Corp.

"Description of A Water Saving Device," Paul Wyckoff, Airtemp Division, Chrysler Corp.

"Experience With the Heat Pump After One Year's Operation," D. W. Lynch, General Electric Co.

2 p.m. — Golf tournament, Lake Placid club golf course.

Sightseeing trip by cars and bus to Ausable Chasm and White Face mountain.

6:30 p.m.—Cocktail party in the Golf House.

7:45 p.m.—Dinner, Forest East Suites dining room.

9 p.m.—Dancing, Agora theater.

WEDNESDAY, JULY 1

9:30 a.m.—Third Technical Session —Agora Theater, Vice President Leon Buehler, Jr., presiding.

Sound Film (colored), "Air Conditioning Test Facilities," S. S. Bartlowe, Bohn Aluminum and Brass Corp., Adrian, Mich.

"Sound and Vibration Control," R. L. Miller, Anemostat Corp.

"Selection of Capillary Tubes for Domestic Refrigerators, Home Freezers, and Air Conditioning Units," J. R. Prosek, International Harvester Co.

"Metastable Flow of "Freon-12"—Flow in Comparatively Stable Condition," P. F. Pasqua, University of Tennessee.

"Corrosion Resistant Finishes for Air Conditioning Equipment," P. O. Blackmore, Interchemical Corp.

Presentation of Charter to Houston Section.

Announcement regarding 49th annual meeting, Washington, D. C.

1 p.m.—Council luncheon-meeting, White Birch room.

Wage-Price Freeze--

(Concluded from Page 1, Column 5)

credit control when wages, prices, and rents were frozen.

However, the Senate, before passing the bill, amended it so that the freeze could be ordered only by Congress in war or an emergency, and not by Presidential action. The House Banking Committee then knocked out any authority for such a freeze in the House version of the bill.

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AIR CONDITIONING & REFRIGERATION NEWS holds a plus value for you because it's a member of the Associated Business Publications. It's a paid circulation paper that must earn its readership by its quality. . . . And it's one of a leadership group of business papers that work together to add new values, new usefulness, new ways to make the time you spend reading the NEWS still more profitable.

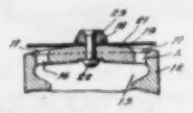
AIR CONDITIONING AND REFRIGERATION News

One of a series of ads prepared by THE ASSOCIATED BUSINESS PUBLICATIONS

PATENTS

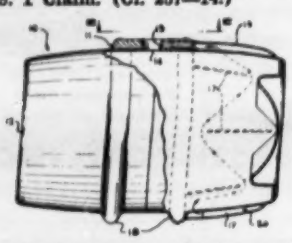
Week of December 23 (concluded)

2,622,792. COMPRESSOR INTAKE VALVE. Axel E. Ramclow, Chicago, Ill., assignor to Mills Industries, Inc., Chicago, Ill., a corporation of Illinois. Application March 8, 1946, Serial No. 653,201. 1 Claim. (Cl. 230—221.)



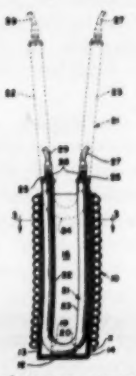
In a fluid compressor, in combination, a cylinder, a reciprocable piston in said cylinder having in its head a valve seat of annular shape, and a normally flat valve disc of thin, resilient metal, the central region of said head being flat and the central portion of said disc being rigidly secured to said flat portion of the head, said head sloping gradually outwardly from said central flat portion and having valve openings in the outer part thereof adapted to be closed by said disc when the same is flexed to conform to the contour of said head, the dimensions and flexibility of said valve disc being so coordinated with respect to its normal spacing from said valve seat and with respect to the speed of reciprocation that said disc will assume a convex shape and make closing contact with said seat under the effect of inertia on the compression stroke of the piston and will lag in closing until a maximum amount of fluid has been drawn into the compression chamber of the cylinder.

2,622,852. BEVERAGE COOLING CONTAINER. William T. Skrzycki, Detroit, Mich. Application Dec. 2, 1949, Serial No. 130,745. 1 Claim. (Cl. 257—14.)



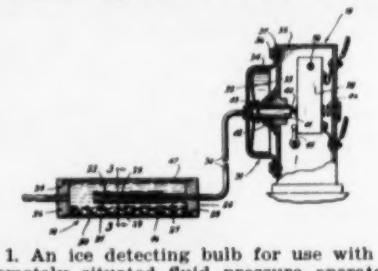
In a metal beverage container and dispenser adapted to be cooled by a circulating fluid coolant, the combination of a cooling chamber along the lower sidewall thereof, the lower sidewall of the container comprising the inner wall of said cooling chamber, and the outer wall of said cooling chamber consisting of a shell surrounding and spaced from the lower sidewall of the container and having its top and bottom edges secured to said container in a fluidtight seal; a plurality of spaced substantially vertical baffle members extending between the inner wall of said cooling chamber and the outer wall thereof, said baffle members defining a vertical sinuous path for the flow of fluid therethrough between the top and bottom portions of said cooling chamber; a separator plate which obstructs said cooling chamber and prevents passage of the coolant fluid therebeyond; a bung plate disposed on the side of said container above said cooling chamber and having inlet and outlet conduits therein communicating with said cooling chamber on different sides of said separator plate.

2,622,854. HEAT EXCHANGER. Herbert A. Bendfelt, Oak Park, Ill., assignor to Mills Industries, Inc., Chicago, Ill., a corporation of Illinois. Application Sept. 28, 1948, Serial No. 51,529. 6 Claims. (Cl. 529—242.)



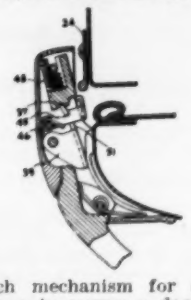
1. A heat exchanger comprising: a pair of elements providing opposed surfaces fixed relative to each other; means for refrigerating at least one of said surfaces; and a conduit for containing matter to be refrigerated, said conduit being disposed between said surfaces and comprising a resilient U-shaped member, the leg portions of which are normally flared to a V-shape with an over-all dimension in substantially the entire length thereof greater than the distance between said surfaces, whereby when said member is inserted between said surfaces said leg portions are forced against said surfaces to retain said conduit between the latter and to provide a positive heat exchange contact between said surfaces and said conduit.

2,622,923. ICE BANK CONTROLLER. Clifton A. Cobb, University City, Mo., assignor to Missouri Automatic Control Corp., St. Louis, Mo., a corporation of Missouri. Application March 11, 1949, Serial No. 80,910. 2 Claims. (Cl. 297—3.)



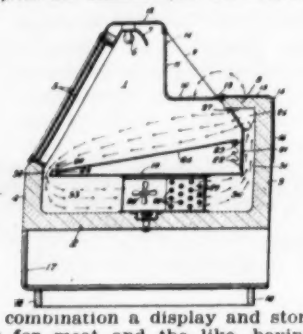
1. An ice detecting bulb for use with a remotely situated fluid pressure operated refrigeration control device having an expansible chamber, said bulb comprising a closed metal outer tube of circular cross section and relatively thick wall, and a closed metal inner tube of relatively thin flexible walls supported centrally within said outer tube, said inner tube being flattened so as to have substantially flat and parallel opposite side walls and rounded edges and being of such size as to be spaced from the side walls of said outer tube, a fluid conduit connecting one end of said inner tube with said expansible chamber, said inner tube, said conduit, and said expansible chamber being filled with a non-freezing motion transmitting liquid, and said outer tube containing an amount of water sufficient to abruptly displace upon freezing, a substantial portion of the liquid in said inner tube, and an amount of non-freezing liquid immiscible with the water to complete the filling of said outer tube.

2,622,910. LATCH MECHANISM. Edwin B. Jacobson, Grand Rapids, Mich., assignor to Crampton Mfg. Co., a corporation of Michigan. Application Feb. 17, 1949, Serial No. 76,898. 9 Claims. (Cl. 292—336.)



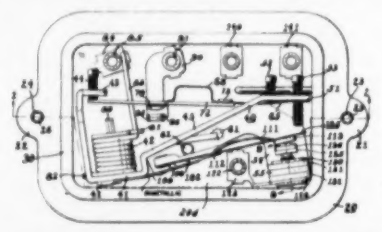
6. A latch mechanism for cooperation with a keeper to secure a door in closed relationship with a container, said keeper being attached to the outer side surface of said container, comprising: a fixed member adapted to be secured to the outer surface of said door at points outwardly disposed with respect to the plane of the opening covered by said door, said member having an overhanging portion disposed to pass over and beyond said keeper as said door is closed; bolt means; supporting means associated with said overhanging portion for said bolt means; and means for interposing said bolt means between said support means and said keeper and withdrawing said bolt from interposed position.

2,622,954. COUNTER FOR THE COOLING, STORAGE, DISPLAY, AND DISPENSING OF MEAT AND OTHER FOODSTUFFS. Arthur G. Merkle, Marshall, Mich., assignor to Sherer-Gillett Co., Marshall, Mich., a corporation of Illinois. Application May 5, 1949, Serial No. 91,553. 15 Claims. (Cl. 312—140.1.)



1. In combination a display and storage counter for meat and the like, having a vertically disposed back wall terminating below the top of the counter, the wall having an inwardly extending horizontal extension below the top of the counter, a door along the inner boundary of the horizontal extension, adapted to engage the top of the counter to close it the door when in the closed position having a horizontal portion generally parallel with and in alignment with the top of the horizontal wall extension and an upward portion perpendicular thereto extending from the inner boundary of the horizontal portion to engage the top.

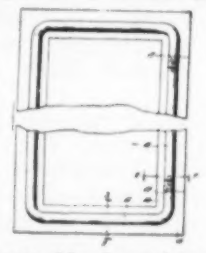
2,623,138. THERMOSTATIC SNAP SWITCH. Joseph Edward Kumler, Columbus, Ohio, assignor to Ranco Inc., Columbus, Ohio, a corporation of Ohio. Application Nov. 1, 1947, Serial No. 783,573. 2 Claims. (Cl. 200—138.)



1. Switching mechanism comprising toggle mechanism including an elongated toggle arm, an elongated leaf spring member having one end connected with one end of the toggle arm, the free end of the spring member extending substantially parallelly along the side of the toggle arm, toggle spring means interposed between the free end of the spring member and the confronting end of the toggle arm, said spring means being pivoted on the confronting end of the toggle arm, a frame forming the sole support for the toggle mechanism and having a part spaced outwardly but closely adjacent said one end of the toggle arm, and a bimetallic leaf, said leaf having one end secured to the part and the other end thereof being connected with the toggle arm solely at a point spaced longitudinally from that end of the toggle arm which is connected with the spring member.

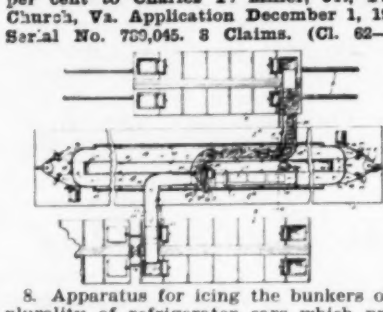
Week of December 30

2,623,248. REFRIGERATOR DOOR CONSTRUCTION. Ralph Saunders, Blackhills, Esher, England. Application August 3, 1949, Serial No. 108,351. In Great Britain August 16, 1948. 1 Claim. (Cl. 20—35.)



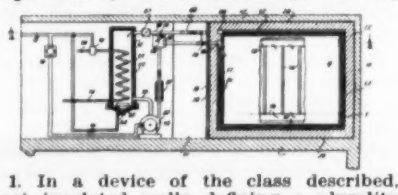
A door assembly for refrigerators, including a door and frame, in which the mating parts of the door and the frame are made in the form of light alloy castings which are substantially semi-circular in cross-section, the door being provided with a front annular bead of circular cross-section, adapted to contact with the frame when the door is closed, and the frame being provided at the rear with an annular bead of curved cross-section with which the door makes contact when the door is closed, whereby there are formed two annular and substantially monodimensional lines of contact between the door and the frame and, due to the shape of the door and the frame, and whereby there is substantially a shear action on any ice that may form along the line of contact.

2,623,363. APPARATUS FOR MECHANICALLY ICING REFRIGERATOR CARS AND THE LIKE. Vaughan B. Williams, Sr., Dallas, Tex., assignor of forty-nine per cent to Charles P. Miller, Jr., Falls Church, Va. Application December 1, 1947, Serial No. 789,045. 8 Claims. (Cl. 62—1.)



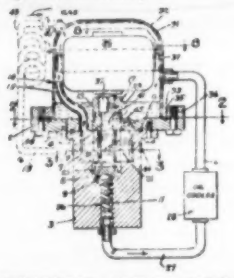
8. Apparatus for icing the bunkers of a plurality of refrigerator cars which presents a longitudinal row of hatch openings comprising an elongated platform, an ice supply means mounted on said platform, belt conveyor means movably mounted on said platform, said belt conveyor means including laterally spaced substantially parallel runs movable longitudinally in opposite directions on opposite sides of said ice supply means, means for directing ice to said runs selectively, and bunker loading means movably connected to said platform providing lateral outlets for ice from said conveyor runs.

2,623,364. MEHOD OF AND APPARATUS FOR REMOVING MOISTURE FROM THE INTERIOR OF THE WALLS OF COLD STORAGE ROOMS. Carl Georg Munters, Stocksund, Sweden. Application July 17, 1947, Serial No. 761,682. In Sweden September 6, 1946. 10 Claims. (Cl. 62—89.)



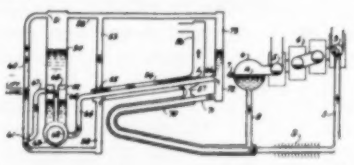
1. In a device of the class described, heat insulated walls defining a plurality of cold storage rooms, said walls being formed with air circulating passages therethrough, a blower having an intake opening and a discharge opening, conduit means for connecting said discharge opening to the passages in the walls forming said plurality of rooms to supply air thereto, conduit means for connecting said inlet opening to said passages to withdraw air therefrom, means forming a chamber interposed in the last mentioned conduit means, cooling means in said chamber, a shunt connection between said discharge opening and said chamber, and valve means for controlling flow of air through said shunt connection.

2,623,365. REFRIGERATOR PUMP. Leonard J. Daniel, St. Paul. Minn. Application July 14, 1947, Serial No. 760,811. 5 Claims. (Cl. 62—117.7.)



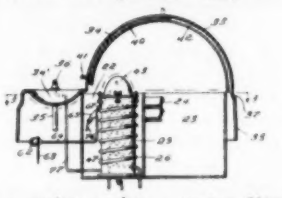
1. A compressor pump comprising a body having a cylindrical bore provided with intake and discharge openings, means forming an oil reservoir, a rotor eccentrically disposed in said bore and having a hollow shaft extension at its upper end, a motor connected to said shaft extension, a single piston blade mounted for relative movement in the rotor and having its ends sealingly engaging the cylindrical wall of the bore, an oil circulating pump in the lower portion of said body comprising a reduced bore extending downwardly from said enlarged bore and forming a cylinder, a spiral piston secured directly to and operable with the rotor to constantly circulate a lubricant downwardly through said hollow shaft to lubricate the rotor and piston blade, and a conduit for conducting the lubricant back to the oil reservoir from the oil pump.

2,623,366. GENERATOR ASSEMBLY APPARATUS FOR UNIFORM PRESSURE ABSORPTION TYPE REFRIGERATORS. Walter L. Edel, Louisville, Ky., assignor to Clayton & Lambert Manufacturing Company, Louisville, Ky., a corporation of Delaware. Application June 13, 1949, Serial No. 98,722. 23 Claims. (Cl. 62—119.5.)



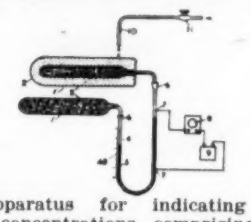
1. A generator assembly for uniform pressure absorption type refrigerating apparatus of the chaarcter wherein liquor flows through a low circuit from an absorber assembly to a low level in a generator assembly where it is lifted to flow through a high circuit from a downflow column in the generator assembly to a delivery level in the absorber assembly comprising: a low circuit analyzer for holding strong liquor up to the normal low or analyzer level of the low circuit, said analyzer having a vapor outlet above and a vapor inlet substantially below said level and strong liquor inlet and outlet openings positioned to accommodate a downflow through the analyzer of strong liquor received from the absorber assembly; a vertically arranged lifting conduit having its lower end connected to receive strong liquor from the analyzer strong liquor outlet up to a lift level which is depressed below said analyzer level, said lifting conduit having a vapor inlet orifice below its lift level; a high circuit separator for holding strong liquor of said high circuit downflow column up to a depressed separator level, said separator having, over its level, a closed vapor space connected to the upper end of the lifting conduit to receive strong liquor and vapor therefrom and a vapor outlet for that space, and, below its level, a strong liquor outlet; a high circuit generator for holding liquid up to a depressed generator level which is above the lifting conduit orifice and below the analyzer level, said generator having, over its level, a closed vapor space and a vapor outlet for that space; a downflow vapor conduit directing vapor under pressure from the generator vapor outlet downwardly and discharging it into the lift conduit orifice against the pressure heat at that orifice; a downflow vapor conduit directing vapor under pressure from the separator vapor outlet downwardly and discharging it into the analyzer vapor inlet against the pressure head at that inlet; and a downflow liquor conduit connecting the seperator strong liquor outlet to the generator below the depressed generator level.

2,623,367. WATER COOLER AND FILTER. Samuel O. Morrison, deceased, late of Pine Ridge, Pa., by Ella P. Morrison, executrix, Pine Ridge, Media, Pa., assignor to Sunroc Refrigeration Company, Dover, Del., a corporation of Delaware. Application January 6, 1950. Serial No. 137,064. 6 Claims. (Cl. 62—141.)



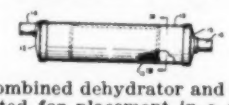
1. In a water cooler, a water filter, mechanical refrigeration means for cooling the water filter, a transparent dome on the filter, an inlet pipe to the filter directing water in a spray against the inside of the dome and a germicidal lamp directed into the stream of inlet water as it enters the filter in the direction of flow.

2,623,391. MEANS OF VAPOR CONCENTRATIONS DETERMINATION. Jerzy Malecki, London, England. Application August 22, 1947. Serial No. 770,045. In Great Britain September 12, 1946. 2 Claims. (Cl. 73—338.)



1. Apparatus for indicating relative vapor concentrations comprising a dry-bulb and a wet-bulb unit, both said units being charged with a multiphase system of a volatile substance, a sheath enveloping the wet bulb, said sheath comprising a body of porous material to retain a wetting agent, a differential pressure responsive indicating device, and conduit means connecting said bulbs in differential relation to said device, whereby the relative vapor concentration may be indicated in response to pressure differentials existing between the respective gas phases of said multiphase systems due to temperature differences between the bulbs.

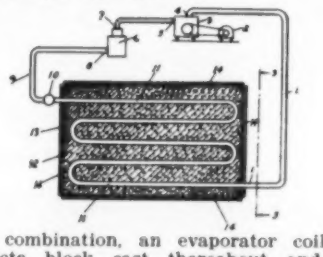
2,623,607. REFRIGERATION DEHYDRATOR. Edward W. Bottum, Detroit, Mich. Application August 16, 1949. Serial No. 110,604. 8 Claims. (Cl. 183—4.8.)



1. A combined dehydrator and accumulator adapted for placement in a refrigerating system to dehydrate a fluid refrigerant and accumulate excess moisture therefrom, comprising a hollow casing having a top which is closed except for an inlet pipe and an outlet pipe extending therethrough into the interior of the casing, a substantially pillow-shaped mesh bag containing a dehydrating agent disposed within said casing below said pipes, said bag having a flattened end portion the edges of which contact the sidewall of the casing to space the said bag therefrom and provide unoccupied space within the casing, the bottom of said casing being closed and the device being adapted to receive a refrigerant through the inlet pipe and dispel it out the outlet pipe after it has been subjected to the dehydrating agent.

Week of January 6

2,624,554. EVAPORATOR STRUCTURE. Willard L. Morrison, Lake Forest, Ill. Application April 6, 1949, Serial No. 85,887. 1 Claim (Cl. 257—255.)



In combination, an evaporator coil, a concrete block cast thereabout and in which the coil is embedded, a metallic foil coating entirely enclosing the block except where the ends of the coil protrude therefrom, the edges of the foil being joined together to make an air tight cover for the block, the air pressure within the block beneath the foil being less than the ambient pressure, the coating being of such thickness and strength that the differential air pressure forces the foil to snugly engage, adhere to and conform minutely with the surface contour of the block.

(To Be Continued)

New Harrisburg Firm

HARRISBURG, Pa.—The Cen-Penn Food & Appliance Service has been opened at 1680 South Cameron St., featuring a complete appliance service.

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6-8-53

Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request **to the purchasing officer under which the purchase is listed** in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid is made.

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Ordnance Ammunition Center, Joliet, Ill.; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. **Ordnance District Offices do not have information on any other purchases.**

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

DEPARTMENT OF DEFENSE

Description	Quantity	Invitation No.	Opening Date
Commandant of the Marine Corps, Washington, D. C. Attn: Supply Department, Procurement Section			
Spare parts for U. S. Thermo Refrigerators, Models MQ51 and MQ51E, U. S. Thermo Control Company	105 itm	1216B	11 Jun 53
Charleston District, Corps of Engineers, Box 905, Charleston, South Carolina			
Construction of warehouse and additions to two cold stage buildings, Shaw Air Force, Sumter, S. C.	Job	(ENG-38-081-53-28B)	24 Jun 53
Purchasing & Contracting Office, 3800th Air University Wing, Maxwell Air Force Base, Alabama			
Installation of air conditioning systems in Buildings 125 and 126 Gunter Air Force Base, Ala.	Job	(01-600-53-117)	12 Jun 53
Commanding General, Jeffersonville Quartermaster Depot, Jeffersonville, Indiana			
Refrigerating units	2 ea.	53-156-B	22 Jun 53
Quartermaster Purchasing Office, Atlanta General Depot, U. S. Army, Atlanta, Georgia			
Installation of water cooling systems, Atlanta General depot	2 each	(QM-09-030-53-49B)	15 Jun 53
District Engineer, Tulsa District, Corps of Engineers, Tulsa, Oklahoma			
Construction of one story wood frame cold storage and meat cutting bldg. and exterior utilities Vance Air Force Base, Enid, Okla.	Job	(ENG-53 122-B)	25 Jun 53
Randolph Air Force Base, Randolph Field, Texas			
Removal of gas-steam radiators and the installation of gas fired warm air systems in NCO Quarters	Job	(41-606-53 69)	15 Jun 53
Corps of Engineers, Albuquerque District, Albuquerque, New Mexico			
Ventilation of 360 EM Barracks, White Sands Proving Grounds, Las Cruces, N. Mex. $25.00 plan deposit	Job	(ENG-29-005-53-146B)	10 Jul 53

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Reference No.	App. Bid Date
Business Service Center, Region 3, General Services Administration, Washington, D. C.			
Dodge power wagon or equal	3 ea.	4K-30555-R	17 Jun 53
Refrigerator body, 4200 lb. GVW	1 ea.		
Business Service Center, General Services Administration, Region 9, 49 Fourth Street, San Francisco 3, California			
San Luis, Arizona, U. S. Border Station, furn. and install two window type air conditioning units	Job	SF-CR-167	17 Jun 53
Business Service Center, General Services Administration, Region 5, 575 U. S. Courthouse, 219 S. Clark St., Chicago, Ill.			
Refrigerators:—		CHD-1041	16 Jun 53
Fed. Spec. AA-R-211c TypeI	34 ea.		
Fed. Spec. AA-R-211c Type II	7 ea.		
VA Spec. T-VA-M-4300c	5 ea.		
Business Service Center, General Services Administration, Region 4, 50 Whitehall Street, Atlanta, Georgia			
Air conditioning work, Varo Belle Isle Bldg., Atlanta, Georgia	Job	CR 4-496	24 Jun 53

CONTRACTS AWARDED THROUGH JUNE 1

Tullahoma District, Corps of Engineers, Tullahoma, Tennessee

Air-Water Cooler (XB 1) for Gas Dynamics Facility, Arnold Engineering Development Center.—Job, $100,076.—A. O. Smith Corp., 310 S. Michigan Ave., Chicago, Ill.

Chicago Quartermaster Depot, U. S. Army, 1819 West Pershing Road, Chicago 9, Illinois

Range, Electric, 53-932-B.—506 ea., $41,426.—Phillips & Buttorf Mfg Co., 217 Third Ave. N., Nashville, Tenn.

Range, Electric, 53-932-B.—300 ea., $52,815.—Universal Major Elec. Appliances, Inc., Baltimore Div., P. O. Box 119, Lima, Ohio.

Ranges, Electric, 53-932-B.—465 ea., $69,661.—Hotpoint Co., a Div. of General Electric Co., 5600 W. Taylor St., Chicago 44, Ill.

Range, Electric, 53-932-B.—608 ea., $52,804.—Hotpoint Co., a Div. of General Electric Co., 5600 W. Taylor St., Chicago 44, Ill.

Refrigerator, Mechanical, Household, 53-965B.—750 ea., $91,845.—Westinghouse Elec. Corp., 1625 K St., N.W., Washington, D. C.

Armed Services Medical Procurement Agency, 84 Sands St., Brooklyn 1, N. Y.

Refrigerator, Mechanical, 53-1228.—145, $56,138.—Ace Cabinet Corp., 358 Belleville Ave., New Bedford, Mass.

Corps of Engineers, U. S. Army, North Atlantic Division, Philadelphia District, 121 North Broad St., Philadelphia, Pa.

Ice Plant, 3.6 ton equipment only, motor-driven, 208 V, 60 cycle or 400 V, 50 cycle, 3 phase.—33, $168,135.—Reco Products Div., Refrigeration Engr. Corp., 150 Nassau St., New York City, N. Y.

Department of the Navy, District Public Works Officer, 62nd & Officer in Charge of Const., U. S. Naval Base, Charleston, S. C.

Air conditioning and alterations Building No. 7 at the U. S. Naval Base, Charleston, South Carolina, NOy-77339.—Job, $58,245.—TriState Const. Co., 114 Ellis St., N.E., Atlanta, Ga.

Westinghouse To Televise Pro Football Games Weekly on Nationwide Network

PHILADELPHIA — For the first time in the history of professional football, a regular schedule of games will be telecast weekly to a nationwide audience this fall, J. M. McKibbin, vice president, Consumer Products, Westinghouse Electric Corp., announced recently.

Westinghouse will sponsor these telecasts over 65 or more TV stations throughout the nation. Virtually every section of the country is scheduled to view games of the National Professional Football League on either Saturday night or Sunday afternoon, McKibbin said.

To the approximately 45 areas which up to now have not been able to see professional football on television, Westinghouse will bring games on Sunday afternoon. In 20 to 25 cities where local sponsors are already telecasting away-from-home games of the professional football teams, Westinghouse will provide a regular schedule of games on Saturday night or Saturday afternoon.

To make possible this Saturday schedule, Belt Bell, Commissioner of the National Professional Football League, said that most of the teams have agreed to play one or more times on Saturady.

The nine-game Saturday television schedule begins Oct. 3 and ends Dec. 12. Seven will be night games. The last two Saturday games, Dec. 5 and 12, will be played in the afternoon.

The Sunday games, Bell pointed out, involve no change in the league schedule. The ten-game Sunday TV program begins Oct. 11 and ends Dec. 13.

The DuMont network will carry the professional football schedule, Chris Witting, managing director of DuMont, announced.

By fall, Witting estimates, there will be a total of 27 million television homes in the U. S. Of this number, about 26,200,000 sets will be in cities where the pro football schedule will be telecast.

Illinois Appliance, Peoria, Named Thor Distributor

CHICAGO—Thor Corp. has announced the appointment of Illinois Appliance Inc., Peoria, Ill. to succeed Johnson-Moody Co. as Thor Distributor in that city.

The Johnson-Moody appliance operations have been liquidated and the business dissolved.

Bryant-Tinsley Co. Gets Charter

LOUISVILLE, Ky. — Bryant-Tinsley Co. here has been granted a charter by the Secretary of State to distribute, sell, and service refrigeration, air conditioning, and heating equipment.

Whirlpool Appoints Platts As Director of Purchasing

ST. JOSEPH, Mich.—John Platts has been appointed director of purchasing for Whirlpool Corp., it was announced by Donald W. Alexander, vice president in charge of operations.

During the 13 years that he has been associated with Whirlpool, Platts has served as buyer, director of defense contract purchases, and assistant purchasing director. Most recently he has held an executive position in the sales department.

Thompson, Head of Norge Market Analysis, Dies

CHICAGO — Glenn T. Thompson, manager of the market analysis department, Norge Div., Borg-Warner Corp., died recently in a Chicago hospital after an extended illness. He was 44 years old.

Thompson held his position from the time he joined Norge in June, 1950. Prior to that he was with the market research dept. of Hotpoint.

Surviving Thompson are his widow, Lillian, and sons, Glenn Jr. and Russell.

Admiral Reports 57% Rise In Sales for First Quarter

CHICAGO—Admiral Corp. recently reported a 102% increase in net earnings and a 57% increase in sales for the first quarter of this year.

John B. Huarisa, executive vice president, announced net income of $3,056,878, equal to $1.56 a share, on sales of $69,191,849 in the first three months of 1953, compared with earnings of $1,515,506, or 77 cents per share, on sales of $43,970,356 attained in the same period in 1952. Share earnings are based on 1,965,230 shares now outstanding.

Opening of new television stations and the substantial replacement market developing in older television areas contributed to the higher first quarter sales, Huarisa said. Another factor, he added, was good business in fringe communities.

The Admiral official described the outlook for the second quarter as "very good." Today's business is highly competitive, he said, and requires the use of imaginative selling at the retail level.

Consumer acceptance of new products introduced by Admiral in January is encouraging and the company will be able to sell as many home freezers, electric ranges, and room air conditioners as it can produce during the remainder of the year.

G-E Assigns Riley Special Job In Distribution Research

LOUISVILLE, Ky.—The assignment of Edward J. Riley to special duties with the General Electric Co. Major Appliance Div.'s distribution research section has been announced by L. H. Miller, manager of distribution research.

Riley, who joined the company in 1946 at Schenectady, N. Y., has been manager of employe relations at the Schenectady works since June of 1951.

Scranton Dealer Moves

SCRANTON, Pa.—Sugerman's appliance store has opened in a new location at 217 Wyoming Ave. The firm opened its original store here five years ago.

MANUFACTURERS' REPRESENTATIVES!

As an industry service, AIR CONDITIONING & REFRIGERATION NEWS maintains a file of manufacturers' representatives—serving the refrigeration, air conditioning, and allied industries—in all parts of the country and in some foreign countries.

We periodically check our files to expand this service and request all qualified representatives (except those who have written within the last six months) to send us the following information today on their own letterheads:

1. Complete name of company or individual, address, and phone number.
2. Lines and products now carried (not necessary to list manufacturer represented).
3. Lines and products being added or interested in adding.
4. Territory covered by states, parts of states, or countries.

Please send the above information to:

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CLASSIFIED ADVERTISING

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RATES for all other classifications $7.50 per insertion. Limit 50 words. 15¢ per word over 50.

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POSITIONS WANTED

ATTENTION JOBBERS: Young man, age thirty, seven years' experience in refrigeration, air conditioning and heating wholesale supply; thoroughly familiar with all departments, buying, merchandising, selling; desires to make connection with growing organization with opportunity for advancement. Qualified as office manager, purchasing agent, or outside salesman. Available thirty days. BOX 4319, Air Conditioning & Refrigeration News.

2 HIGHLY-qualified store fixture and refrigeration sales engineers desire to represent a manufacturer in the mid-west territory. Know all phases of installations on supermarkets, restaurants, taverns, drug stores, and liquor stores. Design and draw our own plans. All propositions considered. BOX 4322, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

SALESMAN FOR commercial refrigeration and/or air conditioning for distributor retail sales in Mississippi. Plenty of hot weather. Wonderful opportunity for "key man" position in growing organization. Must be experienced, A-1 salesman. State full details indicating experience, past sales record, salary or commission requirements, and availability. ENGINEERING SUPPLY COMPANY, Starkville, Miss.

SALES REPRESENTATIVE. Substantial, well-known, quality manufacturer of sectional walk-in and reach-in freezers and coolers desires Midwest representation, particularly Illinois and Wisconsin, for contacting dealers, contractors, dairies, frozen food processors and distributors. Complete national acceptance with hundreds of installations. Official of company will be in Chicago June 17 and 18 for interviews. Send resume and information on other lines handled. BOX 4318, Air Conditioning & Refrigeration News.

DETROIT REFRIGERATION Jobber requires an experienced counter man. If you have the experience we will pay you top wages. Excellent working conditions. Replies will be held strictly confidential. State full details on experience and availability. BOX 4321, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

TWO 3-hp., 3-phase, 110-220 compressors, Freon, complete with motors and controls. Water cooled (Copeland). One 1½-hp., single phase, 220 volt, compressor, Freon, complete with motor and controls. Air cooled (Copeland). One 3-blower, "Humi-Temp" coil, water defrost, with valves (Larkin). Two 2-blower, same. Above have been used three years, but all in excellent condition. Will sell all or part. F. M. LAXTON, 2616 No. Davidson St., Charlotte, N. C.

BRAND NEW, latest model Compressors up to 5 hp. at tremendous savings! Sealed units—¼ hp. @ $45; ⅓ hp. @ $55; ½ hp. @ $70. Model S64 ¼ hp. domes (motor compressor assemblies) @ $33. Also ¼ hp. DC and 25 cycle AC open-type. Quantities limited, so act now! MANN REFRIGERATION SUPPLY CO., 440 Lafayette St., New York City. Gramercy 3-8000.

CARRIER COMPRESSOR, model 7G8. 40, 50, or 60 hp. In original crate with 40-hp. pulley, flywheel and belts. Price $1,950.00.

PARAMOUNT REFRIGERATION, 275 Woodbridge Avenue, Highland Park, N. J. CHarter 7-5057.

ATTENTION SERVICEMEN — Send for our 1953 Catalog. Relays, expansion valves, controls, dehydrators, V belts, open & hermetic units. All new merchandise at great savings up to 50%. Sold on Money Back Guarantee. WALTER W. STARR REFRIGERATION, 2833 Lincoln Ave., Chicago 13, Illinois.

FOR SALE: Packaged air conditioners, 45 model GSC-500 (5-ton) Gemcos. 1 model RK-20 (20-ton) USAirCo with evaporative condenser. 1 model RK-10 (10-ton) USAirCo with evaporative condenser. 2 model RK-5 (5-ton) USAirCo with evaporative condenser. 1 model RK-3 (3-ton) USAirCo with evaporative condenser. 3 model 41-B (5-ton) Carriers. All are in operating condition. Will negotiate price for entire lot. TATUM AIR CONDITIONING, 121 North Commerce St., Corsicana, Texas.

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MANUFACTURER'S AGENT wants lines of reputable equipment. Will give your product the representation it needs. Operating out of Jacksonville and covering any or all of Florida, Georgia, and Alabama. Engineer, experienced in design, estimating and contracting of air conditioning, heating, ventilating, process piping and plumbing. Has directed large sales force and has had own mechanical contracting company. Write BOX 4313, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

ACE CABINET Corp. manufacturers of low temperature refrigeration equipment desires representatives to call on dealers. Excellent opportunity for right men. Write giving complete details, past experiences and the state or states which you could cover. ACE CABINET CORP., 1457 Broadway, New York 36, N. Y.

PROFITABLE COMMERCIAL refrigeration business in one of California's best territories. 3-county franchise for large market equipment manufacturer. Net averages 16% to 21%. Normal annual net $15,000.00. Sell inventory and equipment approximately $20,000.00 cash. Will help new owner to establish. Write R. GRANING, 1537 D St., San Bernardino, Calif.

MANUFACTURER'S REPRESENTATIVES desired for various territories in United States for our new Cooler Cub bottle water coolers. These are smaller in size and weight but equal in capacity to others. Extremely attractive price setup. Give full background and territory covered. REMCOR PRODUCTS COMPANY, 321 E. Grand Avenue, Chicago 11, Illinois.

FOR SALE. Established commercial refrigeration sales and service business in a suburb of Los Angeles. Consists of new stucco building, stock and complete shop equipment. Doing good business. Selling because of illness. BOX 4035, Air Conditioning & Refrigeration News.

COMMERCIAL, DOMESTIC refrigeration service business in southern Arizona city. Showing a very nice profit. Established over six years. Reason for sale, ill health. A real opportunity at a sacrifice. BOX 4320, Air Conditioning & Refrigeration News.

MISCELLANEOUS

NORGE SEALED units remanufactured or exchanged. Immediate delivery from stock, 2 year warranty. Freon refrigerant. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Sets of three, $1.15 plus postage. MODERN REFRIGERATION CO., INC., 12541 E. McNichols Road, Detroit 5, Mich.

Detroit Auto Air Conditioning Code--

(Concluded from Page 1, Column 5)

adamant in their belief that it should not.

After several hours of discussion between the industry groups, Commissioner Wolff entered the meeting and made it clear that he had already made up his mind that the code was not intended to cover refrigeration in passenger automobiles and he was going to recommend that it be excluded from the code.

The refrigeration contractors immediately protested, but the commissioner refused to alter his opinion. He declared that he had hoped that the refrigeration and automotive groups could have reached an agreement, but as they had not, the refrigeration contractors were free to carry their arguments to the city council and fight their case there, if they wished.

RACCA HEAD SAYS, "WE ARE JUST BEGINNING TO FIGHT"

After the meeting, George Howe, president of the national Refrigeration and Air Conditioning Contractors Association, who had been invited to attend the meeting by the local contractors group, declared:

"His attitude just made me mad. We are just beginning to fight."

During this meeting and an earlier one called for the same purpose, the refrigeration contractors had argued that the hazards to public safety were as much present in automobile air conditioning systems as in any other air conditioning system.

The license requires that the dealer or manufacturer have a supervisor who is qualified by experience and training to know how to handle the refrigeration equipment safely. They said they could see no reason why the automobile people should be made an exception to the code when everybody else has to abide by it.

The automobile manufacturers, through their spokesman Karl Richards, declared that the automobile industry's experience indicates that problems relating to vehicles cannot be solved on a local level. They must be solved on a state and federal level.

AUTO INDUSTRY LISTS SAFETY STEPS TAKEN

He declared that the automobile manufacturers have already taken what steps they consider necessary to protect the public safety in respect to automobile air conditioning.

These steps include the drafting of recommended practices by the Society of Automotive Engineers to set minimum standards for the installation of air conditioning in automobiles and the drafting of a law to cover auto air conditioning by a subcommittee of the National Committee on Uniform Traffic Laws. When the committee adopts this law it will be published in the Uniform Vehicle Code, he said.

Wolff said that in his opinion as long as automobile mechanics were not licensed when they handled much more risky problems on automobiles, such as hydraulic brakes, gasoline, and tires, he saw no reason to license them to handle "relatively innocuous 'Freon' " gas.

"There isn't enough gas there to worry about," he declared.

It was also his opinion that the refrigeration code was never intended to cover vehicles.

He told the refrigeration men: "I think you fellows are a little wary, unduly alarmed."

The refrigeration contractors dissented strongly.

OBSERVES DANGEROUS PRACTICES

Earlier in the discussion, Maksym declared that he had visited several Detroit automobile plants where automobile air conditioning was being installed. He found, he said, that the manufacturers were not living up to the safety code.

"What practices did you observe that you considered dangerous?", asked Louis Booth of General Motors Corp.

"They were putting in air conditioning without a contractor's license," Maksym replied.

"Could you be more specific about the danger?"

"They were charging an excessive amount of 'Freon-22' into the air conditioning system."

"And what is the danger?"

"An explosion could occur."

There was no comment from the automobile representatives.

Howe, speaking for the national contractors association, pointed out that Detroit is the focal point and what occurs here might well set the pattern for the nation.

He said, "I am a Frigidaire distributor in Chicago. I have applied to General Motors to do the refrigeration service work on Oldsmobile. I haven't found a dealer in Chicago for whom I have serviced a system who could train a man in three years to properly take care of that equipment."

DEALER SEES WORK SUBLET TO REFRIGERATION MEN

Paul Graves, representing the Detroit Automobile Dealers Association, declared, "I strongly feel that the automobile dealers would sublet this refrigeration business to you refrigeration men. They can't afford to set up an extra department and hire a trained refrigeration man. But they would want to be able to handle the little minor complaints of their customers through their regular automobile mechanics."

John Winslow, a refrigeration contractor, declared that the contractors were not demanding licenses just so they could get the business. He asserted that if auto air conditioning mushrooms as he expects it to, the refrigeration contractor could not handle the business anyway. He reaffirmed that the license was needed to make sure that a competent refrigeration man was on the job supervising these installations and service. The danger lay, he contended, in service work by mechanics who have only a sketchy knowledge of refrigeration and there is no one about with enough knowledge to point out their errors.

Maksym declared that the supervisors he had talked to in the factories had very little knowledge of refrigeration. They did not know what they were doing, he asserted, they were just following a blueprint.

SAYS THREE WEEKS TRAINING INADEQUATE

George Murphree, president of the local group, asked a representative of one of the automobile manufacturers who was using his own men to install air conditioning how much training they were given. The answer was three weeks.

Howe asserted that it was impossible to teach a man even the elements of the refrigeration cycle in three weeks, let alone how to install the equipment. "I don't care how intelligent the man is or how good an automobile mechanic he is, he just can't absorb the necessary knowledge that fast."

Maksym suggested that if all the dealers did not feel capable of hiring licensed refrigeration men, the factory could set up a central station for the servicing of air conditioning systems and the central station could be licensed. This would work somewhat in the same way as car radio service is now handled, he indicated.

As a compromise measure, a limited license pertaining only to automobile air conditioning and an examination based on automobile air conditioning only was suggested.

But Richards said that he could see no particular benefit to the automobile industry from a limited license.

"This would be just one of those burdens on dealers that doesn't add anything to the public safety," he declared.

'Look,' 'Post'--

(Concluded from Page 1, Column 3)

air conditioning is now becoming so popular and the milestones in its long, slow development.

About the only milestone that the industry might argue with is the often heard statement that Airtemp made and promoted the first store coolers.

He spices his account with little stories about unusual problems various manufacturers and engineers have had to solve and amusing incidents involving air conditioning.

One such was the attempt of some air conditioning engineers to try and predict the outcome of last fall's political conventions through the amount of heat generated by the delegates as each candidate was nominated. It didn't work.

Jarman starts his article with the prediction that the coming summer will mark the actual beginning of the "Great Era of Air Conditioning." He bases this on popular reaction to the extremely hot summer last year, plus the desire of persons working in air conditioned business places to have air conditioning in their homes.

He repeats the industry's predictions of great expectations for the room cooler and residential air conditioning markets this year and in coming years. He points out that one reason why air conditioning should catch on now where it failed to do so in the 1930's is the development of the hermetically sealed compressor.

"This prevents refrigerant leaks and makes it difficult for people to get at parts to 'fix' them," Jarman states. "The greatest mechanical troubles with coolers always had resulted from people 'fixing' them, including some persons claiming to be experts.

"For some reason," he says, "Americans generally have never learned much about the mechanics of refrigeration."

The *Look* article is of an entirely different nature. It is an attempt to explain in simple terms how air conditioning works, and to point up some of the features that modern room coolers offer. It also offers the prospective purchaser some advice on considerations to keep in mind when buying, including the tip to pick a reliable brand and dependable dealer.

Pictures of Sid Caesar and Imogene Coca explaining the refrigeration cycle illustrate the article.

Cyril Tasker Dies--

(Concluded from Page 1, Column 2)

connected with heating and air conditioning.

Tasker was born in Manchester, England and was graduated from the University of Manchester in 1923 with the degree of M. Sc. (Tech.). Until 1930, when he came to Canada, he was on the staff of the British Fuel Research Board.

He became a member of the American Society of Heating & Ventilating Engineers in 1935 and had served as a member of the committee on research, and of several technical advisory committees from 1936 until 1943.

He was elected to council in 1941 and resigned upon receiving the appointment as research director.

He is survived by his widow, Mrs. Ada Ruth Tasker.

Blessing Predicts--

(Concluded from Page 1, Column 4)

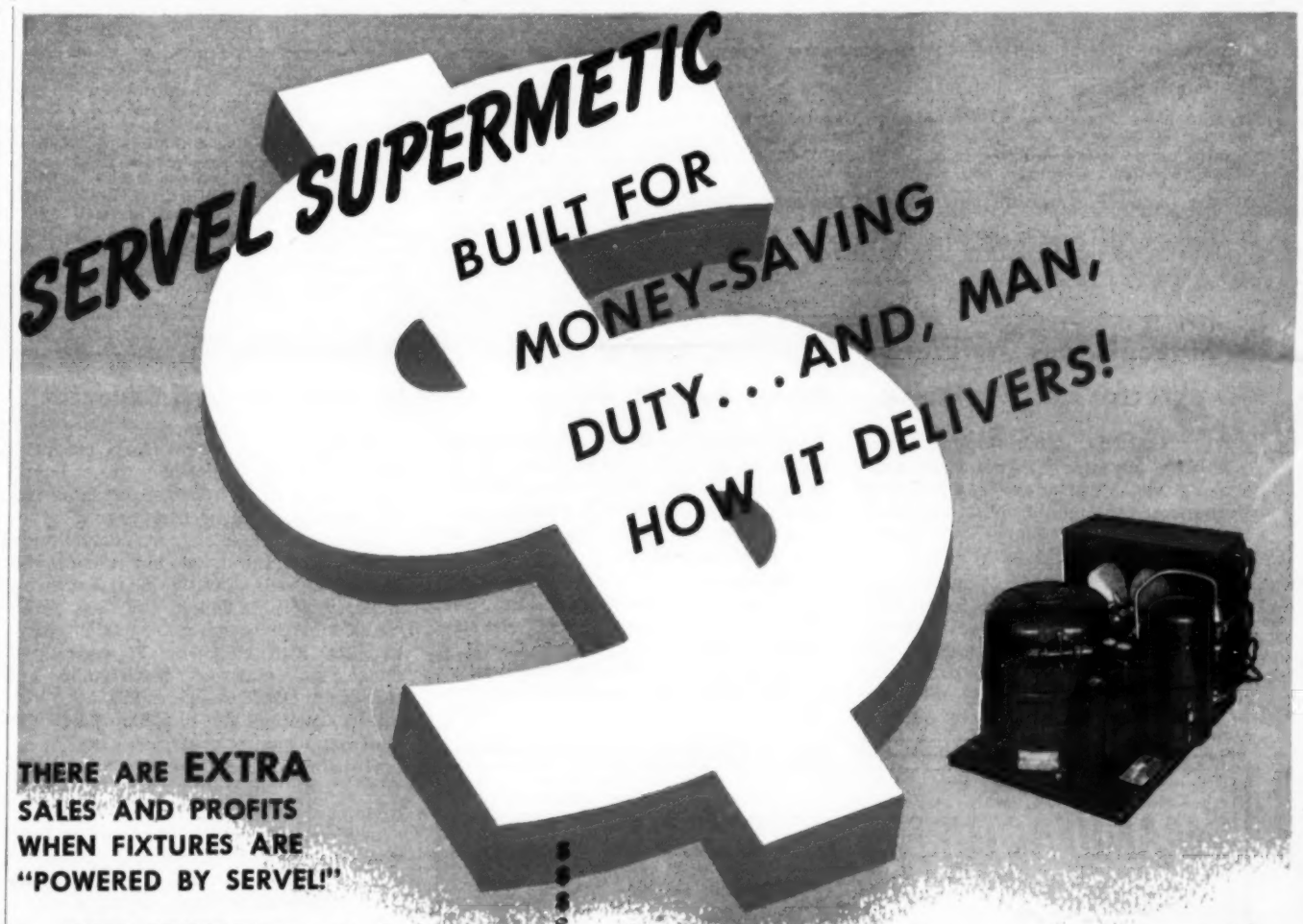
It is estimated that 68,000,000 meals are eaten away from home every day in this country and that 25% of them are eaten at fountain-luncheonettes. In Blessing's opinion that percentage will increase as more fountain-luncheonette service is made available.

He pointed out that today there are more outlets for such equipment than ever before, mentioning particularly the hundreds of drive-ins, motels, and trading centers that are springing up all over the country.

"The demand for the types of fountain-luncheonette equipment we make is steadily increasing," said Blessing. "To take care of this expanding business we have added some new distributors this year, and a number of our distributing organizations have increased their sales staffs, apparently sharing no pessimistic view of the fountain's fate. We now are operating two shifts in some departments and are expanding our manufacturing facilities.

"As we see it, there is plenty of soda fountain business available," Blessing added, "but to get it, a manufacturer must have engineering and designing ability to develop equipment that meets the changing needs of fountain operators, and the manufacturing know-how and facilities to produce it at prices operators can afford to pay.

"He also needs a sales organization capable of helping fountain operators choose the units that they can operate most profitably in their individual establishments."



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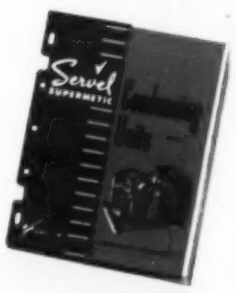

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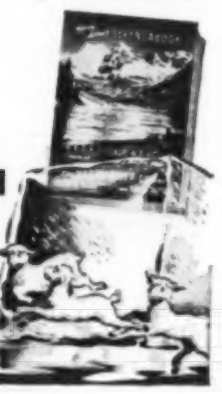
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